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PHASE-OUT OF SINGLE-HULL TANK VESSELS

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

JANUARY 9, 2003

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

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PHASE-OUT OF SINGLE-HULL TANK VESSELS

THURSDAY, JANUARY 9, 2003

U.S. Senate, Committee on Commerce, Science, and Transportation, Washington, DC.

The Committee met, pursuant to notice, at 2:30 p.m. in room SR-253, Russell Senate Office Building, Hon. John McCain, Chairman of the Committee, presiding.

OPENING STATEMENT OF HON. JOHN McCAIN, U.S. SENATOR FROM ARIZONA

The CHAIRMAN. Good afternoon. The Committee meets today to consider issues relating to the required phase-out of single-hull tanker vessels that carry oil in bulk, including calls by some in the international community to accelerate the deadlines for transition to double-hull tankers.

Since the break-up and sinking of the PRESTIGE on November 19, 2002, Spain and France have taken unilateral action against single-hull tankers and the European Commission has adopted a new phase-out schedule for such tankers. As a result of those actions, concerns have been raised about how those actions could, if adopted by the European Union and the International Maritime Organization, impact the international and domestic transportation of oil.

The phase-out of single-hull tankers is not the sole solution to oil spills. Based on experiences here in the U.S., we know that oil spill prevention, response, and damage mitigation efforts necessitate a combination of things, including the phase-out of single-hull tankers, liability and insurance requirements, response preparation and coordination, and improved response technology. This combination is clearly represented in the Oil Pollution Act of 1990, commonly referred to as "OPA-90."

Since OPA-90 was enacted, there has been a significant decline in cargo oil spills. In 1990, 152,000 barrels of oil, the equivalent of 6.4 million gallons, were spilled in U.S. waters. By 2000, the volume of oil spilled had fallen to 24,600 barrels.

About 60 percent of all oil worldwide moves by oil tanker. The U.S. is currently responsible for one-quarter of total oil consumption, and in 2001 we imported 55 percent of our oil supply. Because so much oil and oil products move in and out of the United States and we know from experience that bad things can happen even to sound ships and barges, we must remain vigilant.

It has been over 12 years since the enactment of OPA-90 and I hope that today's hearing will be helpful in shedding light on what

has been accomplished and whether there is a need for any further action on our part to help prevent oil spills or to change our existing policies along the lines of the European Community.

Senator Inouve.

STATEMENT OF HON. DANIEL K. INOUYE, U.S. SENATOR FROM HAWAII

Senator INOUYE. Thank you very much, Mr. Chairman, and I wish to commend you for holding this hearing on this very important matter. Obviously, I am looking forward to assuming my position as Ranking Member on the Merchant Marine Subcommittee, at which time this issue and many others will be considered in the coming years.

Thank you very much, sir.

The CHAIRMAN. Thank you, Senator Inouye.

Senator Stevens.

Senator Stevens. He was the first one.

The CHAIRMAN. Senator Sununu.

STATEMENT OF HON. JOHN E. SUNUNU, U.S. SENATOR FROM NEW HAMPSHIRE

Senator SUNUNU. Something is truly wrong with the decorum in the Senate when I am asked to give a statement ahead of Senator Stevens.

[Laughter.]

Senator Sununu. I am looking forward to the testimony and learning a little bit more about this issue, and I have no further statement, Mr. Chairman. Thank you.

The CHAIRMAN. Senator Stevens.

STATEMENT OF HON. TED STEVENS, U.S. SENATOR FROM ALASKA

Senator Stevens. Thank you very much.

Mr. Chairman, I join Senator Inouye in congratulating you for moving forward on this hearing as quickly as possible. It is almost 13 years ago that Senator Breaux and I managed a bill on the floor that would become the most significant policy change, I think, in maritime transportation of oil. That was the Oil Pollution Act of 1990 that you mentioned. It was in response to the largest oil spill in U.S. history. Eleven million gallons of crude oil poured out of the EXXON VALDEZ, polluting one of the Nation's most sensitive ecosystems and spreading over 350 miles of shoreline in the Prince William Sound on the coast of Alaska.

I went up and flew over that. It was the most awesome sight I think I have ever seen. Alaskans will never forget the devastating effect of that spill and its effect on our wildlife, fisheries, and our overall economy.

Without really being too specific, I think I was the one that negotiated the specifics of the Oil Pollution Act to phase-out single-hull tankers. The proposal was criticized at the time by the international community as being too stringent and aggressive. Nonetheless, we proceeded. I remember at one time Senator Magnusen sent me over to a meeting of that international committee in London to talk about single-hull tankers long before the EXXON

VALDEZ disaster, and I wish they had listened to us then. But we passed a law that provides for safe maritime transportation of oil and the structure necessary for preparedness and response in case

of a spill in the United States.

During the height of Alaskan oil production in 1988 to 1999, there were 70 tankers moving oil from Valdez to West Coast ports. During this period the throughput of the Trans-Alaska Pipeline was 2.1 million barrels a day, near full capacity. Today the pipeline carries only 1 million barrels of oil a day, which means the pipeline is only half full. Because of this decline in production, there are now only 25 tankers presently transporting oil from Alaska.

The American Petroleum Institute, the American maritime industry and trade unions reported last year that we would need to construct 18 new double-hulled vessels to transport oil if Congress opened the coastal plain of Alaska to oil production. Maritime unions also tell us that each ship would create 3,000 direct employment jobs during the period of construction. Those are high-paying jobs, high-skilled and labor-intensive jobs that we do need in the United States.

Last month, the State of Alaska extended the right of way for the pipeline across our state lands. Just this week the Secretary of the Interior signed a 30-year renewal for the federal right of way for the Alaska oil pipeline. The Federal Government believes this pipeline needs to be on line for at least another 30 years, but that means opening up enough lands of Alaska for oil production, and ANWR is still the best prospect.

I know I have come to be a little provincial here today, Mr. Chairman, but I want to announce that this is my No. 1 goal for this Congress, to try to find a way to start to find out if we do have

additional prospects in the northern part of Alaska.

The requirement for Oil Pollution Act compliance, that is the 1980 Act, for single-hull tankers will be phased out by 2015, and this would be—starting new production of tankers for Alaskan oil would be a great opportunity for our shipyards, but only if there is a demand for increased domestic production.

I want to work with you and to try to extend the concept of single-hull tankers for all the tankers that serve our waters, and I think it would be in the best interest of the whole world if we would find some way to not only utilize such tankers, but find ways to limit the transportation of oil by ship wherever it is possible.

Thank you very much.

The CHAIRMAN. Well, thank you, Senator Stevens. Again, thank you for the job that you and Senator Breaux did on OPA-90. It certainly has stood the test of time and, as I mentioned in my opening statement, the dramatic reduction in oil spill over the years has been a direct result of that effort. I think we will all learn a lot. Perhaps, since it has been 12 years, over 12 years, since that law was passed, maybe we will be updated today and our witnesses will be able to give us a snapshot as to how things are today and how they will look in the future.

The prepared statement of Senator Hollings follows:

PREPARED STATEMENT OF HON. ERNEST F. HOLLINGS, U.S. Senator from South Carolina

Mr. Chairman, we are here today to consider the implementation of the Oil Pollution Act of 1990 (OPA-90), and the international agreements that require the retirement and cessation of the use of tankers that have single hulls. Fortunately, since the passage of OPA-90, we have seen a real improvement in the safe marine transport of oil. I would commend the Coast Guard on a fantastic job, who along with agencies like NOAA, have set up a first rate system of prevention and response.

However, the fact is, our marine ecosystem is too fragile too sustain the type of long term damage that can be caused as a result of an oil spill, and all possible care must be taken to ensure that we have a system that protects our marine environment to the maximum extent. I am convinced that we must take all steps necessary to force unsafe tanker tonnage out of the marketplace, and I concur that the double hull design is probably the best technology out there. However, we cannot just sit back and rely on ship design to protect against oil spills. Other steps should be taken to prevent against oil spills. The Coast Guard has a lot of jurisdiction to combat unsafe shipping practices, but the fact is, that we have been forced to rely on a lot of inspectors, and qualifications and such, from foreign nations, and in some cases, I would say that we have to deal with foreign nations that do not police safety and marine operations the way we do here in the United States. We need to level the playing field, and we need to ensure that they are doing as adequate a job of policing as we are.

I would also like to note that I am concerned that many oil companies have gotten out of the business of doing marine transportation, and now they are sitting back and relying on the charter market, and trying to absolve themselves of liability when they hire a cut-rate operator who spills their oil because of shoddy practices. This is just what happened off the coast of France, when the ERIKA sank. Apparently, the French oil company that chartered that vessel was passing out bonuses based on how cheap they could get transportation. Well they got the cheapest transportation, and the nation of France had to pay the costs. This oil company was every bit as responsible for that oil spill as the tanker company, and I can guarantee that if they were liable for their action of chartering unsafe tonnage, they would have spent a lot more time looking for the safest tanker as opposed to the cheapest tanker. Maybe we should look at policies that favor double-hull users, for instance tax credits, or reestablishing the assessments that go into the Oil Spill Liability Trust

Fund on the movement of oil in single-hull tankers.

I am also very concerned that, while the deadlines for the phase out of singlehull tankers is not very far in the future, most oil companies are not being active enough in building or using double-hull ships, with the exception of some companies in the Alaska trade. The companies need to know that we are not going to relax OPA-90, and we are not going to relax the Jones Act. If they want to continue carrying oil in coast-wise trade, they'd best get cracking at building double-hull vessels.

Of course, double-hull tankers by themselves aren't the only solution. As the double-hull fleet begins to age, we will face some of the same risks of a catastrophic oil spill that we are facing with some of these old single-hull tankers. We also need to look at whether more should be done with respect to other types of sources of oil pollution, such as requiring response plans by non-tanker vessels that carry large amounts of fuel oil.

While we have done much better in this area, the stakes are simply to high not to continue to do even better. I look forward to this afternoon's testimony.

The Chairman. So we welcome our witnesses. Thank you for being here. We will start with you, Admiral Pluta, and then we will go to Mr. Keeney and then Ms. Davies. Admiral.

STATEMENT OF REAR ADMIRAL PAUL J. PLUTA, ASSISTANT COMMANDANT FOR MARINE SAFETY, SECURITY AND ENVIRONMENTAL PROTECTION, UNITED STATES COAST **GUARD**

Admiral Pluta. Thank you, Mr. Chairman. Good afternoon, and good afternoon to the distinguished Members of the Committee.

I am Rear Admiral Paul J. Pluta, Assistant Commandant for Marine Safety, Security, and Environmental Protection, and it is a pleasure to appear before you today with my shipmates from EPA and NOAA to discuss the Oil Pollution Act of—

The CHAIRMAN. Could you move the microphone over?

Admiral Pluta. Yes, sir.

It is a pleasure to appear before you today with my shipmates from EPA and NOAA to discuss the Oil Pollution Act of 1990 and

the phase-out of single-hull tankers.

Thirteen years ago, we faced what seemed an insurmountable task, responding to a spill of 258,000 barrels or 11 million gallons of crude oil into the pristine environment of Prince William Sound, Alaska. Coincident with the massive clean-up effort, the Congress, state legislatures, many countries, and the international organizations began an intensive investigation and exploration of the root causes of the accident and deliberated on appropriate prevention and response measures to reduce the likelihood of similar oil pollution incidents.

Here in the United States, the 101st Congress unanimously passed the Oil Pollution Act of 1990, or OPA-90, as Senator Stevens rightly pointed out, and the President signed it into law on August 18, 1990. Since the passage of OPA-90, there has been a dramatic reduction in the volume of oil spilled into U.S. waters per million gallons shipped, declining from 9.7 gallons spilled per million gallons shipped in 1990 to 2.7 gallons spilled per million shipped in 1999, a decrease of over 70 percent.

In broad terms, the public policy objectives of OPA-90 are the prevention of oil spills, the provision of a comprehensive response regime when spills occur, and the assessment of appropriate penalties and liabilities to ensure that polluters pay for damages. As part of the prevention objective, the Oil Pollution Act of 1990 established double-hull requirements for newly constructed tank ships and tank barges that operate in U.S. waters, and established a

phase-out schedule for existing tank vessels.

The OPA-90 phase-out schedule requires that existing single-hull tank vessels be retrofitted with a double bottom, or be phased out of operation by 2010 unless they are equipped with a double bottom or double sides, in which case, some may continue to trade in the United States through 2015 depending on their age. The phase-out schedule is specified in section 4115 of OPA-90, and all tank vessels operating in U.S. waters must have double hulls by January 1, 2015.

It is important to note that certain exemptions in OPA-90 allow single-hull tank vessels to continue to operate in the U.S. through 2015. Any single-hull tank vessel unloading oil in bulk at a deep water port licensed under the Deep Water Port Act of 1974 as amended, or offloading oil in bulk within a lightering zone more than 60 miles offshore may still operate until 2015. Currently, the Louisiana Offshore Oil Port is the only deep water port operating in the United States, and three designated lightering zones are available in the Gulf of Mexico. In addition, the double-hull requirements do not apply to foreign vessels while engaged in innocent passage through U.S. waters.

To provide clarification in applying the provisions of OPA-90, the Coast Guard produced a circular which provides guidance for deter-

mining phase-out dates for single-hull tank vessels operating in

waters subject to the jurisdiction of the United States.

In 1991 the U.S. took the OPA-90 single-hull phase-out proposal to the Maritime Environment Protection Committee, or MEPC, of the International Maritime Organization. This resulted in the adoption of amendments to the International Convention for the Prevention of Pollution from Ships, or MARPOL, in 1992. Regulations 13.F and 13.G of that convention establish a 25- to 30-year life for single-hull tank vessels and require double hulls or tank vessels with designs equal to or exceeding the double hull's ability to reduce or stop oil outflow due to a collision or grounding. While this represented a significant step forward in the elimination of single-hull tank vessels, these international amendments fell short of the phase-out scheme established by OPA-90.

In December 1999, the tank ship ERIKA, containing 30,000 tons of heavy oil, broke-up off the French coast. The European Commission initiated a study which resulted in numerous recommendations and proposals to prevent another such occurrence. One of these proposals was an acceleration of the MARPOL Regulation

13.G phase-out schedule for single-hull tankers.

In June 2000 France, along with Belgium and Germany, submitted a comprehensive paper to the 45th session of the MEPC, proposing an amendment to Regulation 13.G of MARPOL that accelerated the phase-out schedule for single-hull tankers. The U.S. assisted France to ensure that the proposed dates were aligned as closely as possible with the phase-out dates in OPA-90.

At its 46th session, MEPC adopted the modified version of that regulation. However, these dates were not consistent with those in OPA-90, and the U.S. was unable to become a party to these

amendments.

In November of 2002, the tank ship PRESTIGE, carrying approximately 20 million gallons of fuel oil, broke—began leaking after its hull split in a storm. The vessel eventually sank 150 nautical miles off the northwest coast of Spain, and the Coast Guard, along with the National Oceanic and Atmospheric Administration, sent a delegation to assist Spain with the massive clean-up effort. Under OPA-90, the tank vessel PRESTIGE had reached its phase-out date on January 1, 2000, and could no longer operate carrying oil in a U.S. port. In response to the sinking, the European Commission is looking at accelerating the phase-out time line for single-hull vessels to those originally proposed after the sinking of the tank vessel ERIKA.

In conclusion, the success of OPA-90 can be measured by the absence of significant oil spills from tankers in U.S. waters since its passage. It establishes the cornerstones of prevention, preparedness, and response that serve as a useful model for the international maritime community. Nevertheless, we will continue to work with the international maritime community to ensure that shipping remains a safe, economical, and environmentally friendly transport option.

Thank you for the opportunity to testify before you today. I will be happy to answer any questions that you have, Mr. Chairman. Thank you, sir.

[The prepared statement of Admiral Pluta follows:]

PREPARED STATEMENT OF REAR ADMIRAL PAUL J. PLUTA, ASSISTANT COMMANDANT FOR MARINE SAFETY, SECURITY AND ENVIRONMENTAL PROTECTION, UNITED STATES

Good afternoon Mr. Chairman and distinguished Members of the Committee. I am RADM Paul J. Pluta, Assistant Commandant for Marine Safety, Security and Environmental Protection. It is a pleasure to appear before you today to discuss the Oil

Pollution Act of 1990 and the phase-out of single-hull tankers.

Thirteen years ago, we faced what seemed an insurmountable task: responding to a spill of 258,000 barrels (11 million gallons) of crude oil into the pristine environment of Prince William Sound, Alaska. Coincident with the massive cleanup effort, the Congress, state legislatures, many countries, and international organizations began an intensive investigation and exploration of the root causes of the accident and deliberated on appropriate prevention and response measures to reduce the likelihood of similar oil pollution accidents. Here in the United States, the 101st Congress unanimously passed the Oil Pollution Act of 1990 (OPA–90), and the President signed it into law on August 18, 1990. Since the passage of OPA–90, there has been a dramatic reduction in the volume of oil spilled into U.S. waters from tankers per million gallons shipped—declining from 9.7 gallons spilled per million gallons shipped in 1990 to 2.7 gallons spilled per million gallons shipped in 1999, a decrease of over 70 percent.

In broad terms, the public policy objectives of OPA-90 are: the prevention of oil spills, the provision of a comprehensive response regime when spills occur, and the assessment of appropriate penalties and liabilities to ensure that polluters pay for

As part of the prevention objective, the Oil Pollution Act of 1990 established double hull requirements for newly constructed tank ships and tank barges that operate in U.S. waters and established a phase-out schedule for existing tank vessels. The OPA-90 phase-out schedule requires that existing single-hull tank vessels be retrofitted with a double hull or be phased-out of operation by 2010, unless they are equipped with a double bottom or double sides, in which case some may continue to trade in the United States through 2015 (depending on their age). The phase-out schedule is specified in section 4115 of OPA-90 and all tank vessels operating in U.S. waters must have double hulls by January 1, 2015.

It is important to note that certain exemptions in OPA-90 allow single-hull tank

vessels to continue to operate in the U.S. through 2015. Any single-hull tank vessel unloading oil in bulk at a deepwater port licensed under the Deepwater Port Act of 1974, as amended, or offloading oil in bulk within a lightering zone more than 60 miles may still operate until 2015. Currently, the Louisiana Offshore Oil Port is the only deepwater port operating in the United States and three designated lightering zones are available in the Gulf of Mexico. In addition, the double hull requirements do not apply to foreign vessels while engaged in innocent passage

through U.S. waters.

To provide clarification in applying the provisions of OPA-90, the Coast Guard produced Navigation and Vessel Inspection Circular number 10-94, "Guidance For Determination and Documentation of the Oil Pollution Act of 1990 (OPA-90) Phase-Out Schedule For Existing Single Hull Vessels Carrying Oil in Bulk." This circular

out Schedule For Existing Single Hull Vessels Carrying Oil in Burk. This circular provides guidance for determining phase-out dates for single-hull tank vessels operating on waters subject to the jurisdiction of the United States.

In 1991, the U.S. took the OPA-90 single hull phase-out proposal to the Maritime Environment Protection Committee (MEPC) of the International Maritime Organization (IMO). This resulted in the adoption of amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) in 1992. Regulations 13F and 13G establish a 25–30 year life for single-hull tank vessels and require double hulls or tank vessels with designs equal to or exceeding the double hulls' ability to reduce or stop oil outflow due to a collision or grounding. While this represented a significant step forward in the elimination of single-hull tank vessels, these

amendments fell short of the phase-out scheme established by OPA-90.

In December 1999, the tank ship ERIKA carrying 30,000 tons of heavy oil broke up off the French coast. The European Commission (EC) initiated a study, which resulted in numerous recommendations and proposals to prevent another such occurrence. One of these proposals was an acceleration of the MARPOL regulation 13G phase-out schedule for single-hull tankers. In June 2000, France (along with Belgium and Germany) submitted a comprehensive paper to the 45th session of the MEPC proposing an amendment to regulation 13G of MARPOL that accelerated the phase-out schedule for single-hull tankers. The U.S. assisted France to ensure that the proposed dates were aligned as close as possible with the phase-out dates in OPA-90. At its 46th session, MEPC adopted the modified version of 13G that requires the phase-out of all single-hull tankers by 2015. However, since the dates were not consistent with those in OPA-90, the U.S. was unable to become a party to these amendments

In November 2002, the tank ship PRESTIGE, carrying approximately 20 million gallons of fuel oil, began leaking after its hull split in a storm. The vessel eventually sank 150 miles off the northwest coast of Spain and the Coast Guard, along with National Oceanic and Atmospheric Administration (NOAA), sent a delegation to assist Spain with the massive clean up effort. Under OPA-90, the tank vessel PRES-TIGE had reached its phase-out on January 1, 2000 and could no longer operate

carrying oil in a U.S. port.

In response to the sinking, the European Commission is looking at accelerating the phase-out timeline for single-hull vessels to those originally proposed after the sinking of the tank vessel ERIKA and more in line with the United States' OPA-90. This might also include an immediate prohibition on the carriage of heavy or persistent oils in single-hulled tank vessels. The Coast Guard currently has a delegation meeting with the European Commission to discuss their proposals. The economic impact of the EC initiative is unclear at this point. The April 2000 Government Accounting Office (GAO) report to Congress recommended that MARAD regularly assess the progress being made to replace phased-out single-hull vessels to determine whether sufficient shipping capacity exists to meet domestic oil needs. MARAD indicates that it intends to continue such assessments with the Coast Guard's assistance and routinely report its finding to the Congress until the phaseout for single-hull tank ships is complete on January 1, 2015.

In conclusion, the success of OPA-90 can be measured by the absence of signifi-

cant oil spills from tankers in U.S. waters since its passage. It establishes the connerstones of prevention, preparedness and response that serve as a useful model for the international maritime community. Nevertheless, we will continue to work with the international maritime community to ensure that shipping remains a safe, eco-

nomical, and environmentally friendly transport option.

Thank you for the opportunity to testify before you today. I will be happy to answer any questions you may have.

The CHAIRMAN. Thank you, Admiral. Mr. Keeney, welcome.

STATEMENT OF TIMOTHY R. E. KEENEY, DEPUTY ASSISTANT SECRETARY OF COMMERCE FOR **OCEANS** ATMOSPHERE, DEPARTMENT OF COMMERCE

Mr. KEENEY. Good afternoon, Mr. Chairman and distinguished Members of the Committee. I am Timothy Keeney, Deputy Assistant Secretary of Commerce for Oceans and Atmosphere. On behalf of NOAA Administrator Vice Admiral Conrad Lautenbacher, thank you for inviting NOAA to testify today.

Under several laws, NOAA has been distinguished as a steward of the Nation's ocean and coastal—excuse me—as a steward of the Nation's oceans and coasts and as a trustee of marine resources. As such, NOAA has a strong interest in how tanker accidents impact the ocean and coastal environment, including habitat and liv-

ing marine resources.

Two recent oil spill events off the coast of Europe demonstrate the difficult issues presented by tanker spills. Both tankers were old and broke apart during fierce storms. The PRESTIGE tanker which sunk off the coast of Spain in November of last year, was 26 years old; and the ERIKA tanker which ruptured off the coast of France in 1999 was about 24 years old. Second, both vessels were single-hull tankers.

Both of these events have focused renewed attention on phasing out single-hull tankers in favor of double-hull tankers. NOAA supports the Coast Guard's efforts to implement the Oil Pollution Act requirements for double-hull tankers. Shifting to double-hull tankers, however, is not the silver bullet solution to our problems. Other significant oil pollution threats can or do result from aging infrastructure, including pipelines, shoreside facilities, and nontank vessels, maritime acts of terror, and polluted runoff. In addition, we must also plan for the day when new double-hull tankers become older and decayed.

Mr. Chairman, my testimony will focus on NOAA's roles of prevention, preparedness, and response, restoration, and will conclude with four recommendations.

Under prevention, prevention of marine disasters is hard to measure, but it must remain a priority. Prevention is simply the best way to protect people, the economy, and the marine environment. In addition to regulation, the Federal Government assists prevention by providing information that facilitates safe marine transportation. Today, NOAA is the major provider of geographic, oceanographic, and meteorological information in the form of nautical charts, hydrographic and related surveys, tide and current predictions, and weather forecasts.

New technologies are providing advanced services to meet the needs of modern navigation, including electronic navigational charts and the Physical Oceanographic Real-Time System, or the acronym "PORTS". PORTS measures water levels, currents, and other oceanographic and meteorological conditions that directly

support safe and efficient marine trade.

A report by the Woods Hole Oceanographic Institute concluded that the electronic navigational charts and other new technologies could yield a higher cost-benefit ratio than double-hull tankers, especially in high traffic areas. Accidents such as the EXXON VALDEZ, for example, could be avoided using modern navigational systems.

Under preparedness, despite prevention efforts, we know that spills can and will occur. Without adequate preparation, such as the periodic training and drilling exercises the Coast Guard conducts with NOAA and others, a response will not be effective. NOAA supports preparedness with several products, including the environmental sensitivity indexes, which are maps depicting the location of vital and sensitive natural resources; the trajectory analysis planner, a computer program that helps to predict spill movements so spill response action can be planned even prior to a spill actually occurring; and through regional representatives NOAA helps states, communities, and industry develop contingency plans that are location-specific.

Following the EXXON VALDEZ, many industry cooperatives and companies specializing in spill preparedness and clean-up were formed. Over time, many of these companies have gone out of business or merged, reducing the national investment in research and

development.

Under response, NOAA serves as the primary scientific support to the Coast Guard during oil spills. NOAA's scientific expertise includes oceanographers, meteorologists, chemists, biologists, and others. When an incident does occur, NOAA first assesses the spill's behavior, focusing on immediate health and safety issues. NOAA then provides forecasts, predictions, models, and analysis of

the spill. Experts from NOAA try to determine the threat the spill

poses to living marine resources.

In late November, Spain accepted American assistance following the PRESTIGE tanker disaster. Both NOAA and the Coast Guard sent staff to Spain to assist. NOAA has provided experts on beach clean-up techniques, methods to prioritize sites, marine biology, seafood safety, and forecasting oil spill movements. Currently, three NOAA staff are working in different areas of Spain on PRESTIGE-related issues.

Finally under restoration, under the Oil Pollution Act of 1990 NOAA is responsible for assessing and restoring coastal and marine resources injured by oil spills. When oil threatens and injures coastal marine resources, NOAA provides multidisciplinary teams of scientists, economists, and attorneys that work collaboratively with other natural resource trustees to determine the injury to coastal resources and the restoration required to address those injuries.

In order to build upon improvements in prevention and preparedness, response and restoration, NOAA offers the following four recommendations: One, implement advanced charting technologies and navigation information systems;

Two, institutionalize and improve coordination of oil spill research and development between government, academia, and in-

dustry;

Three, ensure adequate levels of funding for the oil spill liability trust fund:

And four, finally, continue efforts to review potential impacts from tankers and other vessels on the marine environment. Such efforts should include working through the International Maritime Organization.

Thank you, Senator. I look forward to your questions. [The prepared statement of Mr. Keeney follows:]

PREPARED STATEMENT OF TIMOTHY R. E. KEENEY, DEPUTY ASSISTANT SECRETARY OF COMMERCE FOR OCEANS AND ATMOSPHERE, DEPARTMENT OF COMMERCE

Introduction

Mr. Chairman, and distinguished Members of the Committee, I am Timothy Keeney, Deputy Assistant Secretary of Commerce for Oceans and Atmosphere. On behalf of NOAA Administrator Vice Admiral Conrad C. Lautenbacher, Jr., USN (ret), thank you for this opportunity for NOAA to testify on recent oil spills, the phase-out of single-hull tankers, and related issues. The United States Coast Guard (USCG) and Environmental Protection Agency (EPA) are charged with executing many vessel-related laws and regulations, so I will respectfully defer to Assistant Commandant of the Coast Guard, Rear Admiral Pluta, and Deputy Director of EPA, Elaine Davies, on some of these issues. After some introductory remarks, I will discuss NOAA's efforts following the recent PRESTIGE tanker disaster off the coast of Spain, and NOAA's role in marine oil spill prevention, preparedness, response and restoration.

Approximately 70 percent of imported oil used by the United States is shipped by tanker. At any given time, oil, petroleum products, and other hazardous materials account for about half of all cargo in transit upon U.S. waters, most of it in tankers or tank barges. NOAA's principal concern regarding tankers is the impact of spills on the ocean and coastal environment, including habitat and living marine resources. NOAA is a steward and trustee of many of the Nation's coastal and marine resources pursuant to the Oil Pollution Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Marine Mammal Protection Act, the National Marine Sanctuaries Act, and other laws. NOAA has a strong interest in vessel activities because of its marine stewardship responsibilities and has some capability

to regulate vessels under these authorities, depending on actual or potential impacts on NOAA's trust resources. Having such broad stewardship responsibilities also creates an incentive for NOAA to work closely with sister agencies that have more direct regulatory responsibilities over maritime activities. Two agencies that we coordinate with are the Coast Guard and EPA.

Two recent events that resulted in major oil spills off the coast of Europe demonstrate the difficult issues presented by major oil spills from oil tankers. First, both tankers were old. The tanker, PRESTIGE, which recently broke apart off the coast of Spain, was 26 years old. The ERIKA was about 24 years old when it broke apart of Spain, was 26 years old. The ERIKA was about 24 years old when it broke apart off the coast of France in 1999. The average age of a tanker in the global tanker fleet at the beginning of 2002 was 18.2 years. ¹ Second, both vessels were single-hull tankers, as are the majority of the estimated 9,716 tankers of 300 gross tons and over operating globally. ² Third, both PRESTIGE and ERIKA broke apart during fierce storms. Fourth, international shipping typically involves a host of actors, which can make it difficult to determine the responsible party in the event of an oil spill. For example, the PRESTIGE was a Japanese-built ship, owned by a company registered in Liberia, managed by a Greek firm, registered in the Bahamas, certified by an American organization, and chartered by a Swiss-based Russian trading company. Finally, PRESTIGE was traveling neither to nor from a European Union port. Port State control offers an important mechanism for a country to impose regulations on ships; however, it is extremely difficult (if not impossible) to do so for ships merely in transit past a Nation's coast. so for ships merely in transit past a Nation's coast.

The global nature of the maritime transport industry presents a strong argument for a uniform set of environmental and safety rules. A diverse array of unilateral regulatory approaches could contribute to increased costs for the tanker industry and ultimately for national economies and consumers. Uniform rules allow for the efficient, economic conduct of business and creates a level playing field among the participants. However, agreeing to and approving uniform rules through the International Maritime Organization (IMO) can take considerable time to accomplish, and since IMO works primarily by consensus, a country may not achieve its desired outcome through the IMO process. The bottom line is that nations (and their political subdivisions) directly impacted by major spills inevitably face heavy pressure to take rapid and decisive action. A nation may decide that domestic legislation is

the best way to protect its interests.

Double hulls can provide an added measure of safety, but shifting to double-hull tankers is not a panacea. Even as we phase out single-hull tankers, we must remain vigilant in providing state-of-the-art navigation data and other preventive and preparedness services. We also must recognize other significant oil pollution threats to public health, commerce, and the marine environment from other aging infrastructure, including pipelines, shore-side facilities, and non-tank vessels. We should also recognize and prepare for the future when double-hull tankers become older and

recognize and prepare for the future when double-hull tankers become older and consequently, are at an increased risks for spills.

A particular concern today is maritime acts of terror. Events like the October 2002 explosion that rocked the Yemen-bound French tanker, LIMBURG, breached both hulls of a new, double-hulled ship, penetrating about 24 feet into the cargo hold. I commend Congress, and particularly Members of this Committee, for recognizing the vulnerability of our ports and coastal communities by passing the Maritime Transportation Security Act of 2002, which President Bush signed the same day that he signed into law the Homeland Security legislation.

I would be remiss if I did not mention that spills are not the only threat to marine

I would be remiss if I did not mention that spills are not the only threat to marine resources from petroleum products. The amount of oil deposited in the coastal waters of the United States from urban runoff, highways and related sources greatly exceeds deposits from the transportation of oil. While the impacts of a major spill can be dramatic, these deposits also present a serious and complex challenge and will continue regardless of ongoing efforts to curb marine disasters from tankers. In addition, natural seepage of crude oil is another significant source of oil in the marine environment, although this natural seepage tends to occur sporadically and at low rates. Devoting attention to distinguishing the effects of petroleum released by natural processes versus anthropogenic activities would greatly aid in understanding crude oil behavior in the marine environment, and how marine life responds to the introduction of petroleum.

The remainder of my testimony will summarize the support NOAA has provided in response to the PRESTIGE catastrophe and then I will update the Committee on NOAA programs and responsibilities in the areas of spill Prevention, Preparedness, Response, and Restoration.

 $[\]frac{}{^{1}\mathrm{See}}\underbrace{\frac{}{http://www.isl.org/english/public/shortcommentno3\text{-}e.htm}}^{2}$

NOAA and the PRESTIGE Spill

NOAA offered expert (knowledge only, not products) assistance to Spain after the PRESTIGE sank. Spain accepted and NOAA sent four people to Spain a few days later: two experts in cleanup measures and general organization of information during a spill, a fisheries expert and a damage assessment economist. The U.S. Coast Guard also sent one person with this team from their Gulf Strike Team. The first team was in Spain for two weeks, providing clean-up guidance, helping to prioritize cleanup areas, visiting beaches, and writing reports. When they rotated out, two more NOAA employees, a marine biologist and a cleanup expert, took their place. Three weeks after accepting our original offer of assistance Spain requested a tra-

Three weeks after accepting our original offer of assistance Spain requested a trajectory expert to help them set-up their own capabilities to determine the fate and transport of the oil still coming up from the PRESTIGE. NOAA agreed to help and sent a trajectory expert after Christmas to work with Spain's team. The cleanup expert on the second team was also invited to Madrid to speak to the new Spanish Scientific Commission, which he did. NOAA is currently evaluating the level of our continued support to Spain. On December 18, NOAA Administrator, Vice Admiral Lautenbacher, along with the Commandant of the Coast Guard, met with the Prime Minister of Spain, to discuss our efforts in Spain and to receive his thanks for our continued presence. Vice Admiral Lautenbacher offered further technical assistance to Spain, and the Prime Minister accepted.

Prevention

Prevention of maritime disasters is hard to measure. It is difficult to attribute credit for accidents that do not occur. However, prevention must remain a priority. It is simply the best way to protect people, the economy, and the marine environment.

One way for government to aid in prevention is through regulation. This can include regulating the structural integrity, design, and manning requirements of vessels, such as phasing in a requirement for double-hull tankers. Governments can also regulate vessel traffic, including creating vessel traffic lanes or designating certain sensitive areas off limits. Another regulatory option is to create financial disincentives to pollute, such as OPA, which requires responsible parties to pay the costs of the response and restoration, as well as penalties in certain circumstances.

The Federal Government also facilitates safe marine transportation by providing mariners with vital oceanographic and meteorological information. The life-saving and economic value of this non-regulatory approach was recognized early in our history when President Thomas Jefferson authorized the Survey of the Coast in 1807. Today, NOAA is the major provider of geographic, oceanographic, and meteorological information about our coastal waters. NOAA's services include nautical charts, hydrographic and related surveys, tide and current predictions, and weather forecasts. Although, ultimately mariners are responsible for prudent navigation, NOAA takes seriously its responsibility to provide them with accurate, up-to-date information so that their decisions are well informed.

New technologies are aiding in providing advanced services that meet the needs of modern navigation, including Electronic Navigational Charts (ENCs) and the Physical Oceanographic Real Time System (PORTS). PORTS supports safe and cost-efficient navigation by providing ship masters and pilots with accurate real-time information necessary to avoid groundings and collisions. PORTS includes centralized data acquisition and dissemination systems that provide real-time water levels, currents, and other oceanographic and meteorological data from bays and harbors to the maritime user community. NOAA ENCs support real time navigation, as well as collision and grounding avoidance needs of the mariner, and accommodate a real-time tide and current display capability that is essential for large vessel navigation. NOAA ENCs also provide fully integrated vector base maps for use in geographic information systems (GIS) that are used for coastal management or other purposes. A report by the Woods Hole Oceanographic Institution's Marine Policy Center concluded that ENCs and other new technologies could yield a higher cost-benefit ratio than double-hull tankers. ³

Data from NOAA weather buoys and water level stations also support a backbone of observations in support of an Integrated and Sustained Ocean and Coastal Observing System. PORTS represents a practical application of such a system in support of safe and efficient maritime commerce. Of course, every accident avoided also supports NOAA's responsibilities as a trustee, steward and manager of marine resources by preventing harm to ocean and coastal waters and living marine resources. In addition to enhancing safety and stewardship, this data also promotes

³ Hauke L. Kite-Powell, Di Jin, and Scott Farrow, Expected Safety Benefits of Electronic Charts and Integrated Navigation Systems, May 1997.

more efficient movement of goods. This can provide significant national economic benefits, including supporting the competitiveness of U.S. exports in an increasingly

global marketplace.

I would like to add at this point that an interagency task group at the National Science and Technology Council is planning an international Earth Observation Summit for this coming summer, and has asked NOAA, along with NASA, to coordinate the interagency planning effort. This event will highlight the need for a comprehensive data collection system, which will complement the existing ocean, coastal and terrestrial observation systems.

Preparedness

Even as we seek to prevent maritime accidents, we must be mindful that they can and will occur. How prepared we are to respond in such instances can prevent loss of life and mitigate the degree of environmental and economic harm. The bottom line is that without adequate preparation, a response cannot be effective. The Coast Guard's Incident Command System provides a framework to organize decision-making, understand response strategies, and establish mechanisms for evaluating tradeoffs among response approaches.

In preparation for and in actual response to marine emergencies, NOAA brings valuable expertise, which is readily available to respond to accidental spills as well as deliberate acts of sabotage and threats to homeland security. This expertise includes oceanographers, meteorologists, chemists, biologists, and others who have focused on better understanding the behavior of marine oil and chemical releases and reducing the risks to resources. Examples of services NOAA provides include:

- 1. The Environmental Sensitivity Indexes, which are maps depicting the location of vital natural resources. This information improves the ability to make strategic response decisions.
- The Trajectory Analysis Planner helps predict spill movements, which supports strategic placement of response resources.
- The NOAA Guide to Seafood Safety supports decision making on fisheries that may be impacted by an event.
- NOAA also provides training and participates in joint drills and related activities to enhance our capabilities for responding to spills and conducting natural resource damage assessments.

Improving the ability to respond to a spill was a major focus following the EXXON VALDEZ catastrophe. This included the formation of industry cooperatives and companies specializing in spill preparedness and clean up. Unfortunately, over time many of these companies have gone out of business or merged, reducing the national investment in research and development.

Response

When an incident does occur, NOAA's primary role in a response is to mitigate damage to public health, property and the marine environment and resources by providing scientific support to response agencies. A successful response is dependent on an agency's response capability; and NOAA has made a conscious effort to implement a disciplined, agency-wide capability. Since 1994, NOAA has responded to 896 spill incidents.

NOAA's first efforts involve assessments of a spill's behavior, focusing on immediate health and safety issues for on-scene responders and the public. NOAA offices begin providing regular weather forecasts, tide and current predictions, oceanographic modeling, and analysis of how these may impact the trajectory and related aspects of the event. Experts from NOAA undertake efforts to understand the threats to living marine resources. The need to deploy vessels, aircraft, and instruments, such as tide gauges, is assessed.

Restoration

Under the Oil Pollution Act of 1990 (OPA), NOAA is responsible for assessing and restoring coastal and marine resources injured by oil spills. NOAA is also responsible for developing and maintaining regulations under OPA that guide federal, state and tribal natural resource trustees in their efforts to conduct natural resource damage assessments. When oil threatens and injures coastal and marine resources, NOAA arrives on-scene to take samples of oiled natural resources and collect other information about injuries to natural resources and the services they provide. This information is used in the damage assessment and for restoration planning. NOAA provides multi-disciplinary teams of scientists, economists, and attorneys that work collaboratively with other natural resource trustees to determine the injury to coastal resources and the restoration required to address those injuries.

NOAA also places a high priority on working cooperatively with the parties responsible for the released oil—government and industry working cooperatively can reduce transaction costs and expedite restoration of the injured resources. NOAA has conducted natural resource damage assessments and restoration projects for oil spills across the country, including Alaska, California, Florida, Hawaii, Louisiana, Maine, Maryland, New Jersey, Oregon, Rhode Island, Texas, and Washington. Through these authorities and cooperative efforts, NOAA successfully restores natural resources across the nation and ensures the long-term health of coastal and marine resources.

Conclusions and Recommendations

In order to build upon improvements in prevention, preparedness, response and restoration, NOAA offers the following recommendations:

- Implement advanced charting technologies and navigation information systems. Support for safe and efficient marine transportation should be a priority of a coastal observing system.
- Institutionalize and improve coordination of research and development between government and industry.
- 3. Continue efforts to review potential impacts from tankers and other vessels on the ocean environment. Such efforts should include working through the International Maritime Organization.
- Maintaining a regular schedule of periodic training and drills for oil spill response is absolutely essential.
- 5. Senate assent and U.S. ratification of the Law of the Sea Treaty would strengthen the position of the United States in addressing global ocean issues.

Thank you and I look forward to answering any questions.

The CHAIRMAN. Thank you, sir. Ms. Davies, welcome.

STATEMENT OF ELAINE F. DAVIES, DEPUTY DIRECTOR, OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, ENVIRONMENTAL PROTECTION AGENCY

Ms. DAVIES. Thank you. Thank you, Mr. Chairman. Good afternoon. Thank you, Members of the Committee.

I am Elaine Davies, the Deputy Director of the Office of Emergency and Remedial Response. I am pleased to be here today to discuss EPA's efforts to prevent, prepare for, and respond to oil spills in our Nation's waters.

EPA's Office of Emergency and Remedial Response manages the agency's oil program activities. We regulate preparedness and prevention at such facilities as oil production and bulk storage facilities and refineries. We share responsibility for responding to oil spills with the U.S. Coast Guard. We respond in the inland waters and Coast Guard responds along the coast. We have a very good working relationship with the Coast Guard as well as with NOAA and we are indeed, as Admiral Pluta says, shipmates. In practice, EPA and Coast Guard often provide each other technical assistance and support regardless of where the spill occurs.

The Coast Guard, however, is principally responsible for most marine transportation-related oil spill prevention activities, including the subject of today's hearing, the phase-out of single-hull tankers.

EPA strongly supports the Coast Guard's effort to implement the Oil Pollution Act requirements for double-hull tankers. We feel that the phase-out of single-hull tankers is an important component of Federal efforts to protect our Nation's environmental and natural resources from potentially catastrophic oil spills.

Every year EPA evaluates approximately 13,000 reports of oil spills to determine whether there is a need for the agency to respond, and we do respond at approximately 300 of those, where we manage the event or we provide oversight. The vast majority of responses are done by the parties who cause the spills. In conducting the response, we use the national contingency plan, which provides the blueprint for all Federal oil and chemical spill response.

We also chair the National Response Team, and Coast Guard is our Vice Chair. This is a group composed of 16 Federal agencies who meet regularly to deal with preparedness, prevention, and response, planning and policy issues, and then can provide valuable response and assistance during a spill. In responding to a major spill, we would make use of incident command, which is an excel-

lent organizational tool for such an event.

Since the EXXON VALDEZ spill, there has been significant effort to improve readiness in the Nation. One element is area contingency planning, which has gone on for the last 12 years since the passage of OPA. The plans are created and updated by those who would actually respond, the federal, the state, the local, and industry, and they have made tremendous progress.

In conclusion, I want to say preparedness and prevention are the surest way to protect human health and the environment from the

harmful effects of an oil or chemical spill.

Mr. Chairman, I ask that my entire written statement be submitted for the hearing record. I will be pleased to answer any questions you may have.

The CHAIRMAN. Without objection. Thank you, and thank all the witnesses for coming today.

[The prepared statement of Ms. Davies follows:]

PREPARED STATEMENT OF ELAINE F. DAVIES, DEPUTY DIRECTOR, OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, ENVIRONMENTAL PROTECTION AGENCY

Good Afternoon Mr. Chairman and Members of the Committee. I am Elaine Davies, Deputy Director of EPA's Office of Emergency and Remedial Response. I am pleased to appear today to discuss EPA's responsibilities in the event of a major oil

spill in our Nation's waters.

EPA's Oil Spill Response Program is an integrated program that works to prevent, prepare for and respond to spills at a wide variety of facilities that handle, store, or use oil across the country. EPA regulates approximately 400,000 facilities, including oil production, bulk oil storage, and oil refinery facilities that store or use oil in above-ground and certain below-ground storage tanks. Additionally, EPA is the principal federal response agency for spills in inland waters, including oil pipeline ruptures and tank spills.

EPA shares the responsibility of responding to oil spills with the U.S. Coast Guard (USCG). Further, we share the responsibility for prevention and preparedness with USCG and several other federal agencies. The USCG responds to spills that occur along the coast of the United States, or the coastal zone, and EPA responds to spills that occur in the internal United States, or the inland zones. The exact lines between the inland and coastal zones are determined locally and established by Memoranda of Agreement (MOAs) between regional EPA and Coast Guard offices. While oil spills that occur off the coast of the United States and certain transportation related oil spill prevention activities, such as the phase-out of single-hull tanker vessels, are the principal responsibility of the Coast Guard, EPA often provides assistance and works closely with the USCG at all times.

EPA strongly supports the USCG's efforts to implement Oil Pollution Act require-

EPA strongly supports the USCG's efforts to implement Oil Pollution Act requirements for double-hull tankers. The phase-out of single-hull tankers is an important component of federal efforts to protect our Nation's environmental and natural re-

sources from potentially catastrophic spills.

EPA's Oil Response Program

Each year, millions of gallons of petroleum and other oils are transported and stored throughout the country, creating a significant potential for oil spills and serious threats to human health and the environment. Approximately 20,000 oil spills are reported to the Federal Government each year, and of those, EPA evaluates as many as 13,000 to determine if its assistance is required. On average, EPA either

manages the oil spill response or oversees the response efforts of private parties at approximately 300 sites per year.

The type and extent of EPA's participation in an oil spill response varies depending on who is actually leading the oil spill cleanup and where the spill is located. Ing on who is actually leading the on spin cleanup and where the spin is located. If the party responsible for the spill is unknown, unwilling, or unable to clean up the spill, EPA may be the lead responder, and the response decisions and activities are made by EPA and paid for by the Federal Oil Spill Liability Trust Fund. This is, however, a rare occurrence, and the majority of oil spills are cleaned up and paid for by the parties responsible for the spill, with EPA's advice or under EPA's directions.

tion, or in some instances by a state agency.

The type of technical assistance EPA provides after an oil spill includes air and water monitoring support and access to the Federal Environmental Response Team, a group of highly skilled environmental experts available to employ the most upto-date and innovative technological practices to each and every response situation.

EPA is also responsible for maintaining the National Contingency Plan's (NCP) Product Schedule. The NCP Product Schedule lists chemical and biological products available to a federal On-Scene Coordinator (CSC) that may help clean up an oil spill. Due to the unique nature of each oil spill, and the potential impact on natural spin. Due to the unique nature of each off spin, and the potential impact of natural resources, OSCs help determine which products, if any, may be used on a particular spill. To make the best use of this resource, an OSC, in consultation with the Regional Response Team (RRT), is the final decision maker in determining which technology and particular product would most successfully assist in the spill cleanup.

EPA's Oil Spill Coordination With the USCG

EPA and the USCG closely coordinate our activities to ensure an effective national oil spill response program. One major coordination tool is the National Contingency Plan (NCP). The NCP is the Federal Government's blueprint for responding to both oil spills and hazardous substance releases among federal, state, and local authorities. Additionally, it provides the government with a framework for notification, communication, and responsibility for response to an oil spill.

Under the NCP, another major coordination tool is the National Response Team (NRT). Composed of up to 16 federal agencies, with EPA serving as chair and the Coast Guard serving as vice-chair, the NRT assists responders by providing information, technical advice, and access to resources and equipment during an incident. In the event that response is needed by more than one federal region, the NRT

helps coordinate the overall response efforts.

In addition to the NRT, there are 13 Regional Response Teams (RRTs), one for each of EPA's ten regional offices and one each for Alaska, the Caribbean, and the Pacific Basin. RRTs are co-chaired by each EPA Region and its Coast Guard counterpart. The RRTs work with the federal OSC in making certain response decisions,

and identifying and accumulating specialized resources.

For example, through the RRT, the OSC can request and receive assistance on natural resource issues from the Department of the Interior, or borrow specialized equipment from the Department of Defense. Involvement of the RRT in these response decisions and activities helps ensure efficient agency coordination while providing the OSC with the assistance necessary for successful response.

In addition, during major oil spills, EPA joins with other responders in implementing an Incident Command System (ICS). This system provides the OSC with an organizational structure to facilitate and effectively use the resources from all appropriate federal, state, local and private organizations.

EPA's Oil Spill Preparedness and Prevention Program

While EPA's Oil Response Program is ready to respond whenever necessary, it is always better to prevent spills before they happen. This is the goal of EPA's Oil

Spill Preparedness and Prevention Program.

A principal preparedness tool, Area Contingency Plans (ACPs), are a critical element of the national oil spill preparedness, prevention, and response infrastructure. The plans are created and updated by a committee composed of federal, state, and local agency representatives who will work together during an actual emergency response. Chaired by an EPA OSC in the inland zone and the USCG in the coastal zone, the committees work with industry and responders to identify potential discharge scenarios, potentially affected resources (including environmentally sensitive areas), and possible response resources such as equipment and trained personnel. This up-front planning work allows the various agencies, including EPA and the USCG, to become familiar with each other and understand their expected roles and responsibilities during a response. It also ensures that high risk scenarios are considered and practiced before actual spills occur, thereby testing the response mechanism in a given area of the country.

EPA also requires owners and operators at certain high-risk, non-transportation related, oil storage facilities to prepare and submit to EPA a Facility Response Plan (FRP) that outlines exactly how a facility will respond to a worst-case oil spill at the facility. We also manage the Spill Prevention, Control and Countermeasures (SPCC) program, which requires owners or operators of all regulated oil facilities to prepare and implement facility plans to prevent an oil spill.

By working to prevent and prepare for oil spills across the country, the EPA Oil Program actively protects human health and the environment and greatly reduces

the harmful effects of an oil spill.

Conclusion

EPA works diligently to maintain an effective Oil Spill Program. The lessons learned from preventing, preparing for, and responding to oil spills over the past 30 years have enabled EPA to build an overall emergency response program that effectively responds to and mitigates the human health and environmental effects of both natural and man-made events. EPA looks forward to working with Congress as we strive to meet our common goal of protecting human health and our Nation's environmental and natural resources through prevention, preparedness, and response to oil spills.

The CHAIRMAN. I guess that this issue has clearly been made significantly more important because of the threat of acts of terror. Would you agree, Admiral Pluta?

Admiral PLUTA. Yes, sir.

The CHAIRMAN. Including the October 2002 explosion on board the French liner LIMBERG, which was a new double-hulled ship, which is of some interest, I think, in our discussion here.

But what I found interesting in Mr. Keeney's—believe it or not, we do read your statements from time to time.

[Laughter.]

The Chairman. Mr. Keeney, you mentioned in your statement that the PRESTIGE was a Japanese-built ship, owned by a company registered in Liberia, managed by a Greek firm, registered in the Bahamas, certified by an American organization, and chartered

by a Swiss-based Russian trading company.

Finally and very importantly here, PRESTIGE was traveling neither to nor from a European Union port. In other words, a huge amount of damage was done to a European country that this tanker was never even intended to come very close to. I note in OPA—90 that the double-hull requirements do not apply, the phase-in of double-hulled requirements do not apply to foreign vessels while engaged in innocent passage through U.S. waters. Is that an issue, Admiral and Mr. Keeney and Ms. Davies?

Admiral Pluta. Mr. Chairman, yes, it is an issue. But my response to you would be that double-hull is merely one intervention in the package that OPA-90 presents to us, Mr. Chairman. There are many other facets of OPA-90 that have caused changes in the way that oil is shipped to and from the United States, and since OPA-90, we have had other interventions, both domestically and internationally, that permit us to take even more action, port state control action. There is a safety management system in place on these ships now. We have upgraded the standards for training and certification of all the people on watch.

The CHAIRMAN. That does not address my question, Mr. Pluta. If a ship is sailing through, is cruising through United States waters, through our waters-and I do not know exactly which-to show you the level of my ignorance, I am not sure which boundary we use in that connection.

Admiral Pluta. The 12-mile limit, Mr. Chairman.

The Chairman. The 12-mile limit. Some countries use as much as a 200-mile limit, right?

Admiral Pluta. Yes, sir.

The CHAIRMAN. But if that ship is passing within 12 miles of the United States, but it is not going into port in the United States,

it can be forever a single-hulled ship; is that correct?

Admiral PLUTA. Mr. Chairman, under the limits, if it is not a U.S. flag vessel it would have to comply with the limits at IMO, and they would eventually be phased out anyway. But you are quite right that these ships can be passing close to the United States. There are Law of the Sea issues in what is happening off of some countries in Europe that need to be addressed at the U.N. as well, Mr. Chairman. But you are right on target.

The CHAIRMAN. Mr. Keeney? Mr. Keeney. I defer to the Coast Guard on this. This is really not an area that NOAA has direct knowledge, with regards to foreign vessels and the rules that apply to them in U.S. waters.

The CHAIRMAN. Does it concern you if indeed a ship can come within 12 miles of the United States, single-hull like the PRES-TIGE, and not be required to have a double hull at any time, 2015, 2030, whatever it is?

Mr. Keeney. Certainly. Any kind of increased risk concerns us at NOAA to potential damage to marine resources.

The CHAIRMAN. Ms. Davies?

Ms. Davies. We certainly are concerned about any oil spill and we definitely would defer to the Coast Guard on any of the guidelines of the work that they are doing on double-hull, and we would support them in any way we could.

The CHAIRMAN. Admiral, do you believe the PRESTIGE would have broken apart and sunk if it had had a double hull, given your

knowledge of the experience that that ship went through?

Admiral Pluta. Mr. Chairman, it is hard to say until the accident investigation is complete, but my experts tell me that just by virtue of the fact that you have a double hull does not prevent that a vessel is not going to unzip and break apart at sea in heavy weather like the motor vessel PRESTIGE experienced.

The CHAIRMAN. And age is always a factor in the ability of any ship to resist those kinds of things?

Admiral Pluta. Yes, Mr. Chairman, as well as many other fac-

The Chairman. This ship was 26 years old, the PRESTIGE?

Admiral Pluta. Yes, sir. Age as well as how well the vessel is

being maintained and monitored in service.

The CHAIRMAN. And some of them are not, especially if they may be a Japanese-built, owned, registered in Liberia, managed by a Greek firm, registered—the maintenance may not be the best on that kind of ship?

Admiral Pluta. That is always a possibility, Mr. Chairman.

The Chairman. It has been your experience of your many years of observing these ships in the United States Coast Guard?

Admiral Pluta. Yes, sir, that is a distinct possibility.

[Laughter.]

Admiral Pluta. You never can tell. There are some countries and some companies take their responsibilities very seriously, and I think the majority of them do, Mr. Chairman. But there certainly are those that do not and those are the ones that cause the prob-

The Chairman. Mr. Keeney, I believe it was in your statement you recommend ratification of the Law of the Sea Treaty; is that correct?

Mr. Keeney. That is correct.

The CHAIRMAN. Is that the Administration's position?

Mr. KEENEY. I have not checked. My testimony, I believe, did get cleared.

[Laughter.]

Mr. KEENEY. But I did not make any specific calls on that one. We just at NOAA believe that it puts us, the United States, in a stronger position in dealing with other countries in relation to the taking advantage of the provisions of the Law of the Sea Treaty.

The CHAIRMAN. Well, I may have additional questions, but what I think we owe the American people—and from your testimony and everything I know, our agencies of government are doing a fine job, and OPA-90 was not only an excellent piece of legislation, it was eventually copied by other nations. I think that the leadership of our Nation in that is laudable.

I just think, given post-9/11, given the PRESTIGE devastation to the Spanish coastline, that it is appropriate for us to review what we are doing, how we are doing it, and whether there needs to be changes in existing law, or regulations or government policy. That is what I really would like to have from all three witnesses.

Senator Inouve.

Senator INOUYE. Thank you very much, Mr. Chairman.

Admiral Pluta, it is correct that the United States has jurisdiction over foreign vessels entering U.S. waters to do business in the United States?

Admiral Pluta. Yes, sir.

Senator Inouye. All safety practices? Admiral Pluta. Yes, sir. We have port state control provisions that permit us to enforce the international standards.

Senator Inouye. However, I have been advised that, because of the volume of foreign vessels entering American ports, that you oftentimes have to limit your inspection to just inspecting paperwork. Is that correct?

Admiral Pluta. Not exactly, Mr. Senator. But let me explain it this way. There are too many volumes of vessels coming toward the United States for us to board and inspect every single one. But what we use is in our port state control program is a targeting matrix, where we look at the flag state, the owner, the classification society, and we are looking at the charterers now as well. We rate even the performance of the vessel as it has performed, as it has visited the United States before.

We will go through this targeting matrix to see whether that vessel poses a high risk or a low risk to safety or environmental protection in the United States, and that is how we make our decisions on what to board. But when we board, we always look at more than paper. We will look at the general condition of the vessel and go through all the important parts to see where—and we have enough experience to know where to look and what to look for. If we see anything that does not look right, well, we will continue to go further. But if everything looks in order, well, then we will move on.

Senator INOUYE. That is provided you are in that matrix group? Admiral PLUTA. Yes, sir.

Senator INOUYE. Just as an aside, would Senator McCain's PRESTIGE come within that matrix group?

Admiral PLUTA. It would have been phased out January 1, 2000, I think, Mr. Inouye.

Senator INOUYE. I gather that the Coast Guard would like to have a much more thorough inspection process. If that is the case, how much more would you need?

Admiral Pluta. Senator, you have been very generous to the Coast Guard, and I cannot answer your question specifically, but I can tell you that we feel confident that, given the laws that you have given us to enforce, we are using our resources to the best. We are—over a multi-year budget strategy with maritime homeland security overlaid on top of our safety and environmental protection responsibilities, with your good graces, we ought to be able to catch up.

Senator Inouye. I thank you very much.

Secretary Keeney, you cited a study in your full statement in which you concluded that if you implemented the Advanced Charting and Navigation Information System, that could be just as effective as double hulls, especially in busy ports. What is the current navigation information available for U.S. ports? Do we have data that is useful?

Mr. KEENEY. Senator Inouye, we have a system which we refer to as the PORTS system, which NOAA has tried to put in place in some of—many of the major ports in the United States where there is heavy traffic. This is a system that is a shared cost system. It is referred to as—it stands for, again, "Physical Oceanographic Real-Time System," which supports safe and cost-effective navigation, providing ship masters and pilots with accurate real-time information required to avoid groundings and collisions.

The system includes centralized data acquisition and dissemination systems that provide real-time water levels, currents, and other oceanographic and meteorological data from bays and harbors to the maritime user community.

We believe that this system along with the electronic chart information are two excellent tools for reducing the risk of collision or grounding.

Senator Inouye. Have you implemented this program?

Mr. KEENEY. We have. We have implemented—I can give—for the record, I can produce the record of which ports have active programs. This has been a successful program and in every port we have had it, I think we have had great response and cooperation.

In fact, the ports where it is operating right now include Narragansett Bay, the New York-New Jersey Harbor, the Delaware River, Chesapeake Bay, Tampa Bay, Galveston, Houston ports, San Francisco Bay, and the Port of Anchorage, which we just opened at the end of last year.

Senator INOUYE. But this will not be an adequate substitute for

double hulls? You would like to have both, would you not?

Mr. KEENEY. No, I do not think we refer to it as a substitute. We are basically saying that it is actually even more cost-effective than investing in double hulls. The implication was that we go both routes. I can also provide a copy for the record of the study that was done at Woods Hole that verifies my statement.

Senator Inouye. I thank you very much, Mr. Secretary.

Mr. KEENEY. Thank you.

Senator INOUYE. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Sununu.

Senator Sununu. Thank you, Mr. Chairman.

The modern charting and navigation system, Mr. Keeney, that you are speaking of, you referred to as a shared cost. Shared by whom?

Mr. KEENEY. It is shared by the local port facilities, so that the local governments, I believe, contribute toward the expense of installation and operation of the system. That is an important part of, I think, trying to implement the system, that it is accepted.

Senator Sununu. I consider that, generally speaking, one entity, the local port authority.

Mr. Keeney. That is correct.

Senator SUNUNU. So, are they paying for it, or are they sharing the cost with someone else?

Mr. Keeney. Just let me check on that for a minute.

[Pause.]

They are sharing the cost with many of the operators of the port. Senator Sununu. With the operators.

Mr. KEENEY. Right.

Senator SUNUNU. But NOAA is not putting out any money for this, or actually undertaking the implementation itself?

Mr. KEENEY. I think NOAA does put out money for the initial implementation of the program.

Senator SUNUNU. Can you give me an estimate of how much money is put out?

Mr. KEENEY. We will provide that for the record, Senator Sununu.

Senator SUNUNU. Just to try to gauge a sense of how cost-effective it is, at least relative to the burden that is shared by I guess the taxpayers or by NOAA.

Mr. KEENEY. We will provide that.

Senator SUNUNU. What locations—that was a pretty extensive list. I did not see Long Beach on there, knowing Long Beach is a pretty significant port. Are there many ports that have not been touched by the upgrades to navigation and charts that you would like to see take on the new technology?

Mr. KEENEY. We do. We have probably as many as an additional 20 ports that are interested in this program.

Senator SUNUNU. How long has it been available?

Mr. Keeney. 3 years. I think only in the case of—I think San Francisco is the one area where I think they are having difficulty meeting the requirements of maintaining the system because of

some of the financial constraints that they have locally.

Senator Sununu. One of the most striking charts in the package that I saw leading up to the hearing today showed the amount of oil spilled per volume that is shipped in U.S. waters. There really has been a dramatic fall-off in spillage since 1990, obviously due in part to the success of the OPA legislation. To what specific changes in the legislation or required by the legislation do you attribute that to? This is really one, I think, more for the Admiral.

Admiral PLUTA. Thank you, Senator Sununu.

Senator Sununu. In fact, I should point out it is a Coast Guard

graph.

Admiral Pluta. I will be happy to respond, sir. Obviously, the single-hull phase-out has had a major impact by having vessels not be permitted to come back to the United States to trade. Also there are operational measures that we have imposed. We have gotten access to the National Drivers Register and other criminal background kind of checks that we can now make on mariners. We have more stringent civil and criminal penalty procedures that we can go through. We have response plans that are required. That is a very critical issue because-

Senator Sununu. Those sound like excellent provisions. But the nature of the drop-off is so sharp, I was just curious whether there was any one provision that was found to be the most effective. I mean, the threat of criminal provisions; I do not imagine there was a huge majority of vessels that suddenly were being used that were double-hulled in just a 1- or a 2-year period, although that may well be. There may have been a huge influx as soon as the legisla-

tion was passed, knowing that a phase-in was coming.

Admiral PLUTA. Senator Sununu, the best answer I could give you is that in our opinion, it is the comprehensive approach taken by OPA-90 which no one else has done. It is the most comprehensive oil prevention package in existence today, and it has been extremely effective because of all the pieces working together. And we have even refined the process further with other international provisions that we have implemented since then.

So, I do not think it is any one thing. I think it is the whole

package together.

Senator Sununu. Are there any oceanographic conditions, weather conditions, shoreline features, navigational challenges, where the potential damage sustained and spillage sustained by a doublehulled tanker is greater than that of a single-hulled tanker, all

other things such as age or maintenance being equal?

Admiral Pluta. I do not think so, sir. I think I look at it as an equal opportunity environment. You know, you are managing your risk by having—you know, we know through either calculations or by the school of hard knocks when vessels run aground how deep do they get penetrated and we make ships designed, make the people design the ships to avoid those sorts of limits. Of course, there are no guarantees.

But in response to your issue of geography, we have done a study of all of the major ports of the United States, and for those where congestion is an issue or maybe tight entry, some sort of thing like that is an issue, we have vessel traffic systems and traffic separation schemes to try to prevent bad things from happening as well.

Senator Sununu. You may have answered my question, but I was not talking so much about traffic. You said, well, when vessels run aground. A vessel can run aground on rocks, on sand. A vessel can break up because of the stresses involved in waves during very heavy seas. A vessel can be struck by another vessel. All of those accidents involve different sets of strains and scenarios and damage to the vessel.

I guess my question was, is a double-hulled vessel less prone to

catastrophic damage in all cases? You believe so?

Admiral Pluta. My answer, to the best of my knowledge, is yes, sir.

Senator Sununu. Thank you very much.

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Nelson.

STATEMENT OF HON. BILL NELSON, U.S. SENATOR FROM FLORIDA

Senator Nelson. Thank you, Mr. Chairman. This of course is an exceptionally important subject to my state, which has 14 deep water ports, and such an enormous amount of coastline.

Admiral should we consider not accepting the safety certifications of certain classification societies who we determine not to

have the adequate and sufficient safety programs?

Admiral PLUTA. In essence, Senator Nelson, we take—we do grade and score classification societies, and for those vessels that—it is a part of our grading factor that we use in our targeting matrix to decide whether to board a vessel. So, if we have a class society that is suspect, it is probably going to wind up being boarded, and we are probably going to look closer, yes, sir.

But as far as not accepting their work, we take the approach of

overchecking their work.

Senator Nelson. What types of drills do we test to use in order to test the readiness of private companies that are involved in oil

spill clean-up?

Admiral PLUTA. Senator Nelson, we have—and EPA might even chime in on this one as well, Senator Nelson. But we together work with the states and work with the stakeholders and port committees to have drills on a very predictable, routine basis. Plus we have the Spills of National Significance, and it involves not only tabletop exercises, where we get people together and go through scenarios, but then, there is also large-scale exercises where we actually will break out equipment and make sure that everything works. So, the people are trained, the procedures are checked and revised, and the equipment is run to make sure that it is functional.

Senator Nelson. Does the producing of this report by the GAO, which says as U.S. single-hull old vessels are eliminated, few double-hull vessels may replace them, does that, in essence, say that we are not moving to the double-hull vessels and this is, in essence, an impediment to us getting the double hulls?

Admiral Pluta. Senator Nelson, the maritime—I cannot speak specifically for the Maritime Administration, but we have been through this exercise to see, are we going to run into a carriage requirement based on our best predictions, and I think what that report says is with the current bookings for construction, that there may be a shortfall of double-hull vessels to carry what we think our need is going to be.

Senator Nelson. Even with this most recent action of the European Union wanting to speed up the double hulls as a result of this

tanker being sunk off of Spain?

Admiral PLUTA. Senator, certainly if they change their standards for Europe, it will have an effect on the carriage capacity worldwide. But we do not know exactly what they are going to do. One of our Coast Guard people who goes to MEPC is in Brussels right now meeting with the European Commission to find out exactly what they have in mind, and what their timeframe is, so that we can predict for you what potential action the U.S. may consider as a result.

But we do not know, sir. But whatever they decide—if they are going to accelerate their phase-out schedule, it clearly will have an impact, yes, sir.

Senator Nelson. Thank you, Mr. Chairman. The CHAIRMAN. Thank you, Senator Nelson.

I want to thank you for coming today, and I appreciate the information you have provided for the Committee. Thank you very

Admiral Pluta. Thank you, Mr. Chairman.

The CHAIRMAN. Our next panel will be: Mr. Thomas Allegretti, President of the American Waterways Operators; Mr. Joe Cox, President of the American Chamber of Shipping; Mr. Tom Godfrey, the President of Colonna's Shipyard and Chairman of the Shipbuilders Council of America; Mr. David Sandalow, who is Executive Vice President of the World Wildlife Fund; Mr. Dragos Rauta, the Technical Director of the International Association of Independent Tanker Owners; and Mr. G. William Frick, Vice President and General Counsel, American Petroleum Institute; Mr. Robert Cowen, Senior Vice President and Chief Operating Officer of the Overseas Shipbuilding Group.

I am sorry, I apologize for it being a little crowded at the witness table. We will begin with Mr. Allegretti, who is the President of the American Waterways Operators. Welcome, Mr. Allegretti. Thank you for coming to the Committee today.

STATEMENT OF THOMAS A. ALLEGRETTI, PRESIDENT AND CEO, THE AMERICAN WATERWAYS OPERATORS

Mr. Allegretti. Good afternoon, Mr. Chairman and Members of the Committee. On behalf of the 375-

The CHAIRMAN. Could you pull it a little closer there so I can hear you. Thank you.

Mr. Allegretti. On behalf of the 375 member companies in the American Waterways Operators, thank you for holding this important hearing today.

Tank barges account for more of the domestic transportation of petroleum in our country than any mode except pipelines. In fact,

more than 20 percent of the oil that fuels our economy, keeps our cars running, keeps our homes comfortable, is moved each year by

barge.

The recent tanker spill off the coast of Spain is a sobering reminder of the inherent risks of oil transportation and the need for constant vigilance in minimizing those risks. We are very fortunate in the United States that the marine transportation of oil is governed by the Oil Pollution Act of 1990, a law that is working well. While I cannot tell you the OPA–90 has eliminated all of the risks of oil transportation, I can say that the passage of that law launched a process that has worked to reduce spills and to reduce the risk of spills significantly.

Today, the U.S. maritime industry is moving oil more safely than ever before. Today, more than two-thirds of the U.S. tank barge fleet is double-hulled, years in advance of the OPA-90-mandated phase-out dates. The record over the last decade is an encouraging one. Oil spills in the United States are today at a historic low, and the trend line is pointing in the right direction. Tank barge operators spilled 87 percent less oil in 2000 than they did in 1990. Today, for every one million gallons of oil moved by barge in the

U.S. less than two gallons are spilled.

Just as encouraging as those statistics is the story that is behind the numbers. Tank barge companies have put in place a comprehensive array of safety improvements and spill prevention measures that have not only produced a safer oil transportation system, but one that offers the promise of continued progress in the

years ahead, with the ultimate goal of zero spills.

This array of safety improvements and spill prevention measures is very broad. It begins with better-trained crews. It also includes the establishment of comprehensive safety management systems, like AWO's Responsible Carrier Program. And all of this reflects a sea change in the way companies operate their fleets and within AWO, it is now a condition of membership within our association.

Adoption of these safety management systems reflects our industry's understanding that oil spills are simply not acceptable. They are not acceptable to Congress, they are not acceptable to the

American people, and they are not acceptable to us.

The risk of oil transportation in the United States is further reduced by the OPA-mandated retirement of single-hull vessels. America's tank barge operators are leading the transition to an all-double-hull fleet and have invested more than a billion dollars in new vessels to serve the U.S. energy transportation market. Indeed, single-hull retirements are proceeding at a faster pace than OPA-90 requires, and that represents an enormous commitment by tank barge companies in the business of transporting petroleum by water. My written testimony highlights several examples of these significant company commitments.

Mr. Chairman, as a result of all of this the domestic tank barge industry today is not only maintained and operated more safely than ever before, but is rapidly transitioning to the double-hull de-

sign that OPA-90 requires.

We know that globally and domestically, there is still too much oil spilled into the world's oceans and rivers. In the United States, our industry firmly believes that safety management and spill prevention are never-ending imperatives. The actions Congress took in 1990 are working just as you designed, and as a result the risk of oil spills in the United States today is dramatically lower.

However, our job is not done. Our goal and your expectation is zero spills and a 100 percent double-hulled fleet, and our industry is fully committed to achieving those goals.

Thank you for the opportunity to testify today. I will be happy to take any questions that you may have.

[The prepared statement of Mr. Allegretti follows:]

PREPARED STATEMENT OF THOMAS A. ALLEGRETTI, PRESIDENT AND CEO, THE AMERICAN WATERWAYS OPERATORS

Good afternoon, Chairman McCain, Senator Hollings, and Members of the Committee. I am Tom Allegretti, President and CEO of The American Waterways Operators (AWO), the national trade association for the American tugboat, towboat, and barge industry. AWO's 375 member companies include the owners and operators of tugboats, towboats, and barges that move more than 800 million tons of America's cargo every year, including dry, liquid, containerized and specialty cargoes on the inland river system, the Atlantic, Pacific, and Gulf coasts, and the Great Lakes. We carry over 60 percent of U.S. grain exports, providing American farmers a safe, economical and environmentally-friendly way to stay competitive with foreign producers. We also move enough of the nation's coal to produce 10 percent of all U.S. electricity annually. AWO's members also operate the tugboats that provide shipdocking services in our nation's ports and harbors. The transportation of petroleum and petroleum products is a key segment of our industry's business: tank barges move 20 percent of the oil that fuels our economy and keeps our cars running and our homes warm. Powerful, state-of-the-art tugboats also provide tanker escort services to facilitate the safe movement of petroleum cargoes in busy ports and harbor approaches.

On behalf of AWO's diverse membership, thank you for the opportunity to testify at this hearing on the phase-out of single-hull tank vessels that carry oil in bulk as mandated by the Oil Pollution Act of 1990 (OPA-90). The overriding message I want to leave you with today is this: **the law you passed 12 years ago is working.** Oil spills from U.S. tank vessels have declined to historic lows. American companies have invested more than a billion dollars in new double-hulled vessels to serve the U.S. energy transportation market. While the recent tanker spill in Europe reminds us all of the inherent risks of oil transportation and the need for constant vigilance, you can be proud of the transformation you helped to bring about in the U.S. tank vessel industry. Today, less than one ten-thousandth of one percent of the oil moved by tank barge in this country is spilled. Today, more than two-thirds of the U.S. tank barge fleet is double-hulled, years in advance of the OPA-mandated phase-out schedule. Our job is not over: our goal, and your expectation, is zero spills and a one-hundred-percent double-hulled fleet. We come before you today firmly committed to achieving those goals.

today firmly committed to achieving those goals.

Mr. Chairman, I can tell you that the U.S. tank barge industry is working hard to meet the demand of Congress, our customers, and the American public to move oil safely and securely, with not one drop entering our precious marine environment. In 1990, according to Coast Guard and Army Corps of Engineers' data, the U.S. tank barge industry moved 1.7 billion barrels of oil in U.S. waters. Of that total, 23,600 barrels were spilled. While this means that 99.99998 percent of the oil moved by barges in this country was delivered safely, no one would argue that the 23,600 barrels of oil that did enter the marine environment was acceptable. However, the record since 1990 tells an encouraging story: oil spills in the United States are today at a historic low. In 2000, the last year for which complete statistics are available, barges spilled 87 percent less oil than in 1990, with 3,180 barrels entering the water. That's not perfect, to be sure, but an 87 percent improvement is indisputably a trend line pointing in the right direction.

Oil Spill Reductions Result from a Full Array of Improvements

What is perhaps more encouraging is the story behind the numbers. Spills are a lagging indicator of oil transportation safety; they help us to evaluate the efficacy of the prevention measures we have implemented in the past. Given that we have ten years of post-OPA-90 statistics to look back on, that's an appropriate report card to consider. But, if we look behind the statistics at the state of the oil transportation industry today, we see what might be considered some leading indicators,

some harbingers of future improvements. The fact is that companies in the oil transportation business today have and are continuing to put into place a more comprehensive array of safety improvement and spill prevention measures than any time in the history of oil transportation by water. Taken together, these measures have produced a safer oil transportation system that offers the promise of continuing progress toward our ultimate goal of zero spills.

Perhaps the most significant change in the oil transportation industry today is the degree to which companies have embraced safety management systems that aim to reduce operational risks throughout their operations. The tugboat, towboat and barge industry has been a leader in this transformation. In December 1994, AWO's Board of Directors established the AWO Responsible Carrier Program, a code of practice for member companies. The Responsible Carrier Program establishes safe operating standards—standards that exceed governmental requirements—in the areas of management and administrative practices, vessel equipment and inspections. tion, and human factors, such as training and watchstanding practices. In April 1998, in a tangible demonstration of the industry's commitment to leadership in marine safety and environmental protection, AWO's membership voted to make compliance with the Responsible Carrier Program a condition of membership in the association. Today, all members of AWO, and any company that seeks to become a member, must commit to complying with the Responsible Carrier Program and undergoing an independent, third-party audit within two years of joining the association. This represents nothing less than a sea change in the character of our industry and its trade association.

Complementing the transformation of the oil transportation industry itself is a changed relationship between industry and government. Over the past twelve years, both industry and the Coast Guard have come to appreciate that we are bound together by the common, critically important goal of improved marine safety and environmental protection. Starting from the premise that we share common objectives, we have developed a reservoir of mutual trust and forged a constructive working relationship. We have also discovered a broader array of tools available to us to achieve our common goals. Today, both the industry and the Coast Guard recognize that regulations are just one of the tools that can be used to implement safety improvements. Clearly, regulations have their place, and where they do, we've learned that the regulatory development process can be approached cooperatively. More significantly, we have recognized that there are many opportunities to bring about safety improvements outside the regulatory process. The first-of-its-kind Coast Guard-AWO Safety Partnership was inaugurated in November 1995 for just that purpose—not to replace the regulatory process, but to augment it and encourage companies to go beyond regulatory compliance.

Vessels are safer, as a matter of design, maintenance, and operation. Innovative new technologies are being phased into the fleet. "Z-drive" or "tractor" tugs capable of exerting propulsive power in all directions—the maritime equivalent of the heliof exerting propulsive power in all directions—the maritime equivalent of the helicopter—are transforming the fleet of shipdocking and escort tugs. In the coastal environment, articulated tug-barge units, or ATBs, are gaining recognition for their safety, fuel efficiency, and all-weather capability. Developments in navigation and communication technology, including Automatic Identification System (AIS) technology, offer enhanced collision avoidance capability. Companies have implemented more rigorous maintenance programs to ensure that vessels and equipment remain as safe and functional on the water as they were designed to be in the shippard. The Coast Guard has estimated that 80 percent of accidents are the result of the human factor. Therefore, state of the art vessels and better practices are by them

human factor. Therefore, state of the art vessels and better practices are by themselves not enough. Industry safety would not be possible without qualified, experienced, well-trained vessel crews. That is why there is a commitment to see that vessels. sel crews today are better trained and better prepared to do their jobs safely. Both the Coast Guard and the industry recognize that operational competence means more than the ability to pass a license exam. The Coast Guard has issued regulations establishing new licensing requirements for towing vessel operators that require a practical demonstration of operational skill as a prerequisite to obtain a Coast Guard license. The industry has also invested heavily in training to ensure that qualified crewmembers continue to hone and improve their skills throughout their careers. State-of-the-art training facilities and company training centers established by some of the nation's leading tank barge operators, demonstrate the industry's increasing recognition that training and professional development are good investments and an essential part of doing business safely.

All of these efforts—many of them expensive and all of them requiring the highest level of commitment of both the public and private sector—are working together to produce the significant decrease in oil spills that we have seen over the last decade.

Double Hull Fleet Modernization is Proceeding on Schedule

Even as government and industry sources agree that there is a surplus of tonnage on the market today—more vessels than are needed to meet U.S. demand for oil transportation—America's tank barge operators are leading the transition to an all-double-hull fleet. According to U.S. Coast Guard data, U.S. tank barge operators have built 607 new double-hulled petroleum barges for inland and coastal service since the Oil Pollution Act was passed in 1990. The pace of new construction has accelerated in recent years, with more than a quarter of this total—174 doublehulled barges—built between 1999 and 2002. When looking at vessels of more than 5,000 gross tons, an OPA—90 threshold, the picture is just as bright. Government and industry sources indicate that approximately 50 of these larger vessels have been built since OPA—90 was enacted. In the last three years alone, 32 double-hull vessels greater than 5,000 tons have been built or contracted for. Many companies hold options for construction of additional vessels, while some companies have plans for conversion of existing single-hull vessels to a double-hull configuration.

The capital investment required to overhaul the U.S. tank barge fleet is signifi-

The capital investment required to overhaul the U.S. tank barge fleet is significant: a 30,000 barrel inland tank barge costs some \$1.45 million to build, while a 120,000–140,000 barrel coastal tank barge carries a price tag of \$15–17 million. Because a double-hull barge is much larger than a single hull with the same carrying capacity, vessel owners must often invest an additional \$9–10 million for a more powerful tugboat to move the larger barge. Retrofitting (adding a double-hull to an existing single-hull barge) can shorten delivery time by several months, but the cost remains high: some \$12–13 million for a 120,000–140,000 barrel barge. The cost of a state-of-the-art articulated tug-barge unit, or ATB, runs \$26–27 million.

Given the size of the capital outlay required, companies must weigh many factors in deciding when to build a new double-hulled vessel. Paramount is demand for oil transportation—the strength of shipper demand, and the likelihood that freight rates will be sufficient to offset the cost of such a major investment. If demand is there, building will follow. Building vessels of any kind in the absence of demand hurts the industry, artificially depressing freight rates and undermining the industry's ability to shoulder the investment in modern, environmentally friendly vessels to meet future needs.

Government sources agree that U.S. tank vessel capacity exceeds demand for domestic oil transportation, and will continue to do so until at least 2004. The Government Accounting Office in 2000 found that "industry currently has more vessels than needed to meet the current shipping demand," and concluded that decisions on new double hull construction would likely await reduction of this overcapacity. The U.S. Coast Guard, after consulting with the Maritime Administration, reached a similar conclusion in its September 2001 Report to Congress on the Progress to Replace Single Hull Tank Vessels with Double Hull Tank Vessels, and noted that a number of U.S. flag tank vessels were then working in foreign trades because of overcapacity in the U.S. domestic market.

As American companies strongly committed to the U.S. market, the members of the American Waterways Operators have already made substantial investments in new double-hulled vessels, and stand ready to make additional investments to meet the nation's energy transportation needs, and to continue providing safe, environmentally friendly, and economically efficient service to U.S. shippers and consumers. I'd like to share just a few examples of AWO companies who have, and will continue to, respond to the demands of the market and meet the requirements of OPA-90 in order to ensure the continued availability of domestic carrying capacity for petroleum products. These examples are representative of the commitment shared throughout our industry, and taken together, they help to paint the picture of an industry that is collectively expending more than a billion dollars in this effort.

In New England, which is heavily dependent on barge transportation of petroleum products, family owned companies like Bouchard Transportation Company of New York and Reinauer Transportation Company of New York and Massachusetts have invested hundreds of millions of dollars to ensure that their companies can continue to meet the needs of U.S. shippers and consumers in future generations. Bouchard, founded in 1918, has built seven new double-hulled barges, retrofitted three single hulls, and will take delivery of two new double hulls this year. The Bouchard family has invested some \$200 million so far, and will spend another \$70–80 million by the time its fleet replacement program is complete. Reinauer Transportation, founded in 1923, has spent \$200 million on its own fleet modernization program, which includes two new state-of-the-art ATBs and a third barge scheduled for delivery this year. Reinauer will have to spend tens of millions more to complete the replacement or retrofit of the company's remaining single-hull barges.

Similar investments are taking place throughout the tank barge industry, by companies that are making a tangible commitment to serve the U.S. domestic market

for the future. On the West Coast, Crowley Marine Services, a family company in business for more than a century, has spent \$130 million to date on a fleet replacement program that includes four new double-hulled ATBs. Canal Barge Company of Louisiana, which will celebrate its 70th anniversary in December of this year, has built 69 double-hulled inland tank barges since the passage of OPA-90, at a cost of more than \$70 million. The company will retire its only remaining non-double-hulled barge—a double-sided, single-bottom barge in limited service—in the near future.

This is real money, being spent by real people to comply with OPA-90 and serve the energy needs of the American economy in a safe and environmentally responsible way. The stories of these companies, and those of the dozens of other American tank barge operators, large and small, that are making similar investments are sometimes overlooked in dry macroeconomic analyses and bar graphs showing petroleum movements and fleet tonnage.

As Congress considers the state of OPA-90 implementation today, and the progress of the transition to a double-hulled fleet, it is worth reflecting on these stories and the commitment to the U.S. market they demonstrate. It is also worth noting that, as a practical matter, the marketplace is accelerating the single-hull retirement schedule to a degree few of us envisioned in 1990. This has happened because shippers are demanding that their cargoes be moved in double-hulled vessels, and vessel owners who see themselves as long-term players in the U.S. market are building double-hull vessels to satisfy the demands of their customers, both now and for the future. Congress helped bring this success story about by providing, in OPA-90, for an orderly phase-out schedule that allowed market forces to work—and work they have. Going forward, Congress can best support U.S. vessel owners in meeting their obligations under OPA-90 by exercising its oversight role and making clear its continuing commitment to transitioning to an all-double-hull fleet as provided for in OPA-90.

Conclusion

In summary, Mr. Chairman, the single hull phase-out schedule contained in OPA-90 has provided stability and certainty to the process of transitioning our petroleum carrying capacity from a single-hull fleet to one that is entirely double hulled. For over a dozen years it has been, and it continues to be, the expectation that the existing schedule will remain in effect. Against that backdrop, and with a substantial commitment of resources, American vessel owners are making decisions to invest in new double hull capacity based on a variety of economic factors. The pace of that construction has increased in recent years. The evidence shows that capacity will rise to meet demand, but also that new vessels will not be constructed or contracted for until there is an economic basis for their construction. Subject to these economic considerations, the domestic tank barge industry is transforming its vessels into a fully double-hulled fleet.

Perhaps the best news is that oil spills in U.S. waters have declined dramatically and OPA–90 is working to promote safer transportation of petroleum products and better protection of our marine environment. This is being accomplished through compliance with new regulatory requirements as well as a strong industry commitment to new technologies, safer vessels, constructive partnership with government, comprehensive safety management systems, and improved training for vessel crews. The breadth of the transformation of the U.S. tank barge industry—a transformation that goes beyond the statutory requirements of OPA–90—demonstrates our commitment to the shared goal of protecting our environment while meeting Americans' need for the safe transportation of petroleum products.

Mr. Chairman, thank you for the opportunity to appear before the Committee today. I would be pleased to respond to any questions the Committee may have.

The CHAIRMAN. Thank you very much. Mr. Cox.

STATEMENT OF JOSEPH J. COX, PRESIDENT AND CEO, CHAMBER OF SHIPPING OF AMERICA

Mr. Cox. Thank you, Mr. Chairman. I will submit my statement for the record if I can and I will summarize here.

The CHAIRMAN. Without objection.

Mr. Cox. Thank you, sir.

On behalf of the members of the Chamber of Shipping of America, which are owners, operators, and charterers of vessels—and I point out, Mr. Chairman, they do operate both foreign-flag and U.S.-flag vessels, we are pleased to testify. You have heard some of the issues being discussed in the government panel. In my testimony, I go through a history of phase-out. The phase-out concept does go back to 1978, and the original changes to MARPOL that required tankers to outfit segregated ballast tanks or dedicated clean ballast, then OPA, then two changes in MARPOL. Then I ended that history with the PRESTIGE incident and the proposed EU actions.

Mr. Chairman, I am a little bit questioning about the EU activities. I certainly look at their press releases, I talk to my colleagues in Europe, and I am not at all convinced that we are getting straight answers from each particular European participant. I think we have yet to see what the final outcome of their deliberations is going to be.

However, after the PRESTIGE, Mr. Chairman, my testimony describes what we feel are unacceptable actions taken by individual countries, or by the European Union itself. This includes the arrest of the master of the PRESTIGE after he had come ashore from going through a quite harrowing experience where he lost his ves-

sel and, thankfully, did not lose any of his crew.

Then, two nations, France and Spain, began escorting tankers outside of their 200-mile limit, which we feel is in violation of the Law of the Sea Treaty and also international traditional law of the sea. There is a definite effect on IMO. Mr. Chairman, it was kind of interesting to be at the IMO, where they were talking to us about restrictions with regard to U.S. actions relative to security measures and to what extent we could go out into international waters to inspect vessels for security measures, and at the same time be escorting tankers outside of their waters for environmental purposes.

There will be an effect on IMO, the very same organization that was taking the U.S. to task in 1990 for OPA-90. Some of the same nations that were criticizing the United States then are now proposing actions themselves along the same lines of unilateralism.

Finally, Mr. Chairman, there is a ports of refuge issue that I think is a very important and one for the world to start talking about. That is, when a vessel is in distress, what do we do with that vessel? Do we tell it to go out into some other waters and handle it as best they can or do we have some type of a safe haven available for those ships so that they can come in and possibly, maybe take care of their problem?

Mr. Chairman, we looked at the effect of the 23-year issue, and this is where a little bit of the confusion about the definitiveness of the EU actions comes into play. We looked at vessels over 23 years old in our data base. There are some 1630 tankers in the world's fleet that are over 50,000 deadweight tons, therefore could trade in the international market. Eight hundred thirty-four of those are currently double-hull, and some 168 are over 23 years old, so those vessels cannot come into our ports, although they can trade into LOOP and in offshore lightering.

Now, how many will is a question for the marketplace to determine, because certainly, if Europe puts a ship out of Europe that is 23 years old, it could come into the U.S. It could also trade to the Far East, it could also trade to the Indian subcontinent, and it could also trade into South America. Those determinations would

be made by the marketplace.

Mr. Chairman, I was talking to somebody in the audience today who is a smart guy, and he reminded me about the 15-year-old issue in crude oil tankers and how the Europeans may be discussing not allowing crude oil carried on single-hull tankers over 15 years old. That is a little bit of an interesting issue because I discussed with some friends in Europe yesterday and that would put out of business all their North Sea shuttle tankers except for four of them. So I am not quite sure that they would take that step, but if they do, we would add to that 168 approximately 300 more vessels that would be capable then of trading in other parts of the world than Europe.

Mr. Chairman, the commercial marketplace, at the end of the

day, is going to determine where those vessels go.

You have heard comments about OPA-90. We agree with all those before us. It is a well-thought-out piece of legislation. It is all-encompassing. We will have to review the final EU action to see what vessels would be involved. We certainly—if the Congress feels necessary, if the Senate feels it necessary, to begin a deliberation about those vessels, it is certainly something we are willing to discuss. But we have to address the ships that are affected therein, and not the wholesale review of OPA-90.

You have heard a little bit of reaction from Senator—"Senator Pluta" might be a little bit premature, to call him that, Senator but Admiral Pluta has talked about maintenance. I want to say that, in respect to double-hull, certainly maintenance is as important as any other parameter, including age, and we should put on the record that double-hull is not a panacea. It does provide a great amount of protection in low-energy collisions and groundings. However, in catastrophic situations, it will not be the answer. We have not seen catastrophic situations because mainly, quite seriously or quite frankly, those vessels are relatively new ships with all the newest

The CHAIRMAN. Did you not see one with the French tanker?

Mr. Cox. Well, the French tanker, sir, was-

The CHAIRMAN. You saw a catastrophic-Mr. Cox. Well, that was a terrorist incident. The CHAIRMAN. Is that not a catastrophic event?

Mr. Cox. I am sorry, I would determine catastrophic event in the sense of a grounding, or a collision or some internal problem with the vessel. I think a terrorist incident I would not characterize as catastrophic. However, the effect would be the same.

The CHAIRMAN. I think most-

Mr. Cox. The effect would be the same.

The CHAIRMAN. I do not want to quibble over words with you, but

I think it is a catastrophe, Mr. Cox. Go ahead.

Mr. Cox. On that issue, Senator, it does, the double hull does provide a protection. You do have that extensive void area between the outer hull and the inner hull that any type of an action against the outer hull is going to have somewhat of a protective measure against the inner hull being breached.

We did include, Senator, two other issues which we took the opportunity of responding in terms of your request for comments. One was on terrorism insurance for vessels. It is a very serious problem, particularly applicable to the American operator and owner because his assets are all here in the United States, and he cannot hide behind the registration of a vessel in another locale.

We also discussed the confidentiality of our information in the

ship safety security plans.

Thank you very much, Senator. I will certainly be available for questions.

[The prepared statement of Mr. Cox follows:]

PREPARED STATEMENT OF JOSEPH J. COX, PRESIDENT AND CEO, CHAMBER OF SHIPPING OF AMERICA

Mr. Chairman, we appreciate the opportunity to testify before you today on the subject of double hull phase-out dates and the potential effect of recent decisions by the European Union. The Chamber of Shipping of America (CSA) is an organization that represents companies that own, operate or charter commercial vessels. We were founded over eighty years ago and are involved in domestic and international issue

affecting our members.

Early in December, we attended the Maritime Security Conference at the International Maritime Organization (IMO) that deliberated on and adopted amendments to the Safety of Life at Sea Convention. Those amendments dealt with the vital issue of security in the maritime industry. The resulting requirements that must be met by the ship owning community are comprehensive and the cost will be totally borne by the ship owner. During the year it took to develop those requirements, CSA participated in numerous domestic deliberations with the Coast Guard and were members of the U.S. delegation to the three preparatory meetings held in London. We mention the conference because the main topic of discussion for many other nations' representatives at the conference was the intended actions of the European community in response to the PRESTIGE incident. The PRESTIGE is a single-hull tanker that broke in two off the coast of Spain in November and caused a major spill. The U.S. delegation was focused on the security deliberations and they did a good job of achieving all U.S. objectives. One major point very actively debated on security was the rights of sovereign nations to control vessels entering their waters.

During the conference, a working group was sent out a number of times to draft language allowing nations to take certain steps for security. The working group was very careful to allow security controls yet not violate traditional law of the sea. From the U.S. bench, we saw an incongruous situation where some of the nations at IMO were taking definitive positions on rights of ships regarding security while these same nations were taking actions against ships based on environmental concerns that went beyond what were considered prudent for security. These actions affected single-hull tankers. In explanation of the incongruity of the circumstance, we should discuss briefly the background of vessel control and why double hulls and

the phase-out of single hulls is with us today.

Background

Under well-established international maritime law, it is recognized that any sovereign nation has the right to control vessels entering its maritime jurisdiction. A nation may require an entering vessel to meet any requirements it determines prudent. The corresponding right of the vessel is to not enter the waters of a nation that has requirements it does not agree with or is unable to meet. The role of international treaties is to provide a set of universal requirements that nations can agree. Once agreed, a nation enforces those international requirements on vessels entering its waters although it retains the right as a sovereign nation to require additional measures if it sees fit to do so. This is not an optimum situation for ship owners and we usually object to a nation seeking additional requirements unilaterally. We strongly urge all nations to seek additional requirements in the international fora such as the IMO.

When the "EXXON VALDEZ" ran aground in 1989, she was one of the newest U.S.-flag ships and was built to meet the international requirements for tankers at the time which included segregated ballast (SBT). SBT was placed into the Maritime Pollution Prevention Convention (MARPOL) in 1978 and required a certain percentage of the tanks to be for the carriage of ballast only. These non-cargo carrying tanks were also to be in locations along the hull that provided a degree of protection against collision. The requirements addressed the operational discharge of ballast water that contained oil residue and, to a degree, the threat of collision damage to a cargo tank. Existing tankers were given a short period of time to comply with requirements for dedicated clean ballast tanks or crude oil washing systems. We did not use the term "phase-out" at the time but the effect of the coverage of existing tankers in this manner was to phase-out the existing tanker and replace it with a more environmentally protective tanker albeit one with the same external hull.

After substantial debate on the spill and the causes, Congress wrote OPA–90. Among other requirements, it included one that all tankers calling into U.S. maritime jurisdiction must be double hulled. Included in that debate was much discussion about alternatives to double hulls. While the door was left open for research, OPA–90 did not recognize any alternatives. Once again after much debate, the Congress agreed that the changeover to double-hull tankers was to be accelerated by legislatively phasing out older, single-hull tankers. A very deliberate approach was crafted based on age and size. The U.S. took these actions as a sovereign nation and there is no contention that the U.S. acted outside traditional maritime law, however, because the U.S. is such a large market for tankers, no international owner would consider building a tanker that did not meet the new U.S. requirement. The Coast Guard soon took the issue to the IMO and asked them to place a double hull requirement into MARPOL.

After a relatively short period of review, the IMO amended MARPOL to require double hulls on tankers. A measure was also adopted that would limit the age of existing tankers although the age at which they would be phased out was conservative relative to OPA, i.e. the dates of phase-out were longer than the dates contained in OPA-90. This situation, where some tankers could trade to the U.S. and, when phased out of our trade, could remain in the rest of the world's markets, was static until the late 1990's. On December 12, 1999 a vessel called the "ERIKA" sank and caused a very damaging spill on the coast of France. It was noted in the European press that the "ERIKA" could not trade into the U.S. due to OPA-90 phase-out dates. The subsequent move by the European community was to ask the IMO to revise MARPOL and accelerate the phase-out date of existing single-hull tankers. Once again, the IMO started a discussion on amending MARPOL. The result is a new schedule that is a sliding scale much like OPA-90 although the new schedule still allows tankers to have older phase-out dates than those contained in OPA-90. In the later years of effectiveness for the new MARPOL changes, a tanker is allowed to trade up to 26 years of age. These changes to MARPOL came into force on September 1, 2002 or just four months ago. Regrettably, another incident in European waters occurred this past November and was the subject of the discussion at the conference we refer to above.

The PRESTIGE sank after breaking in two off the coast of Spain. Once again, there was a call for action both in the European press and among representatives of the European Union. This incident, however, highlights a number if issues. While we are not privy to technical details and believe the cause or causes are still under review, we can comment on several steps taken by authorities that we believe are unacceptable.

The master of the PRESTIGE knew he had a problem and requested permission to come into sheltered waters. That permission was denied and the ship was then at the mercy of her own devices in a heavy weather situation. When the ship subsequently sank, with no loss of life, the master was then taken into custody and placed in prison. Two nations, France and Spain then took steps to prevent single-hull tankers not only from entering their waters but also from being within 200 miles of their coasts. We saw press coverage in December of tankers being escorted by naval vessels out of the 200 mile zone. Mr. Chairman, it was a singularly interesting moment to be at IMO debating the rights of sovereign nations to take steps regarding security and have actions being taken for environmental reasons that were in excess of those being debated for security measures. The PRESTIGE was not destined for a Spanish port; she was in innocent passage, so we believe the action taken violates international law.

The topic of discussion among many at the IMO meeting involved phase-out dates and the fact that the PRESTIGE, like the "ERIKA" before her, could not enter U.S. waters. Several persons in authority positions in the European community were calling for a phase-out of tankers as a European Union action.

European phase-out Decision

On December 20, the European Commission announced new measures to "protect our coasts". The steps announced, which have to be adopted by the European Union Council and Parliament, include not allowing single-hull tankers to carry heavy fuel oil in European waters, phasing out single-hull tankers to an accelerated schedule from the MARPOL schedule, and a special inspection program for those single-hull tankers not yet affected by the phase-out. There are several points about this action:

- There is no logical connection between the structural failure of the PRESTIGE (or the "ERIKA") and the debate about single/double hulls, nor any suggestion that a double hull would have made any difference,
- The EU program to accelerate the phase-out dates does not include an analysis of the practicability in terms of shipbuilding and ship recycling capacity,
- The EU is damaging the role and objectives of the IMO, the same organization
 that wrote the new phase-out schedule just come into force at the request of
 the EU.
- The first step taken by authorities after the incident was to criminalize the incident,
- The denial of a refuge for the tanker when she was in trouble is not mentioned nor is a review of the policy mentioned.

Effect on Tankers Calling at U.S. Ports

The EU proposal sets a 23-year age date for phase-out. That is the same as OPA. The EU proposal does not allow any additional time for lightering or calls at offshore terminals; OPA-90 does. OPA-90 allows single-hull tankers older than 23 years to offload at a deepwater port or to lighter in designated lightering zones more than sixty miles offshore. The controlling phase-out dates for these tankers are the new dates contained in MARPOL that came into effect in September. The maximum age in MARPOL is 26 years although the phase-out allows some older tonnage to continue following a sliding scale. We considered all tankers older than 23 years. We are indebted to Poten and Partners, a firm that provides analysis and data to the industry, for the basic data on numbers of tankers, sizes and date of build.

There are 1637 tankers over 50K dwt that serve world trade. Of those, 168 are over 23 years old. That is the potential number that would be permitted to call at our offshore terminal or be involved in lightering, however we really cannot predict what can happen in the market place and using the total number of 168 would be highly misleading. Many of the tankers are not of a size appropriate to use in the Gulf of Mexico. If they are currently in the European market, they would go elsewhere than the U.S. We can assume that not all these tankers are calling at European ports or what portion of their voyages over a time period have them calling into Europe. A number are involved in trades now that are totally outside Europe and the U.S. While we cannot give a firm number of tankers displaced into which markets, we can predict with a degree of certainty that the EU proposal will tighten up the market for double-hull tankers and there will probably be a rise in rates across the board.

At this point, we should mention that 834 of the tankers are double hull and another 161 are double bottom or double side tankers. Single-hull tankers make up less than forty percent of the tanker fleet today and the number continues to shrink.

OPA-90

OPA-90 was a well thought out piece of legislation that balanced risk management and commercial impacts. Industry has planned capitol investment to comply with the OPA-90 phase-out regime. While the actions of the EU affecting these few tankers may deserve review, we do not believe that a wholesale look at OPA-90 is warranted. If the few tankers described above are a concern, they can be dealt with as a separate legislative issue from the phase-out that is taking place predictably and as planned.

Maintenance

A discussion of phase-out based on age does not include the most important issue of any ship, i.e. maintenance. Age is a factor although a greater one is the maintenance of the ship. For many years, the Coast Guard has recognized the need for port state control inspections to ensure that ships calling into the U.S. meet the requirements of the safety and environmental protection treaties. These inspections are more critical than a one-dimensional look at a paradigm such as age. A concern recently voiced among the CSA membership is the continuance of the level of inspections by the Coast Guard. We recognize the Coast Guard is moving to a new department with security as a focus. We do not want to experience a lessening of the de-

gree of oversight of the industry when the move takes place. The continuance of the high quality inspections should continue to serve us well and we support continuing the Coast Guard's budget for safety/environmental compliance inspections.

The invitation to testify asked us to cover other issues. We have two: terrorism insurance and security/safety documents.

Insurance is a major concern. Currently, our protection and indemnity insurance does not cover acts of terrorism. This was a theoretical concern until the "LIM-BURG" was attacked. We have worked on this issue for a time now and our concerns have not lessened. The main point is one of pollution. Whether double hull or not, a vessel is strictly liable for an oil spill. If a spill is caused by a terrorist incident, the vessel is strictly liable and insurance is not available. Arguably, the pollution fund could be available although the determination is made after the fact and we believe that the decision about liability should not wait for oil on the water. We are working closely with the Coast Guard and others on this issue and would like to brief your staff on the issue. Any assistance your Committee could provide is deeply appreciated.

The issue of our documentation on security/safety is one of confidentiality. Many of the CSA members will dovetail their vessel plans for security with the existing safety management plans. The safety plan was used as a paradigm for the security plan and each contains self-audits and management follow up. Our intention is to have these plans and documents as one the company can share with the Coast Guard and other government agencies with a reason to review them and limit the availability to others. At the conference, we were asked to meet with other nations' representatives to ensure the international language permitted the confluence of the two plans. We were successful and note the Coast Guard has recognized this in the

Notice of Meetings they published on December 31, 2002.

Mr. Chairman, we appreciate the opportunity to testify before your Committee today and would be pleased to answer any questions.

The CHAIRMAN. Thank you, Mr. Cox. Mr. Godfrey.

STATEMENT OF TOM GODFREY, PRESIDENT, COLONNA'S SHIPYARD, INC.; CHAIRMAN, SHIPBUILDERS COUNCIL OF **AMERICA**

Mr. Godfrey. Mr. Chairman, thank you.

My name is Tom Godfrey. I am President-

The CHAIRMAN. Would you move the microphone closer. Thank you, Mr. Godfrey.

Mr. GODFREY. Thank you.

My name is Tom Godfrey. I am President of Colonna's Shipyard in Norfolk, Virginia. I am also Chairman of the Shipbuilders Council of America. The council is the oldest and most broad-based trade association representing all sectors of the commercial shipyard industry. Founded in 1920, SCA represents 71 shipyards—71 companies that own and operate 150 shipyards over 24 states, including about 35,000 employees. Our member companies are involved in building and repairing America's commercial fleet, as well as the vessels involved in the U.S. military, the U.S. Coast Guard, and other mid-sized vessels included in the government operations. We maintain these vessels, we repair these vessels, and we also are active in maintaining vessels for the National Defense Reserve Fleet.

Relative to OPA-90, the phase-out of single-hull tankers, clearly, these catastrophic spills in Europe have raised new issues. We are watching the EU very carefully right now, and it appears that new regulations are coming up, and it is quite possible that they are going to promulgate regulations that, frankly, validate the leadership of the United States in the action taken by this Congress 12

years ago in designing and implementing OPA-90.

The EU proposal considers eliminating all single-hull vessels in a certain trade immediately. It would ban all single-hulls by 2010, and would impose very strict inspection schemes on vessels older than 15 years old. In some regards, the EU regulations that are under discussion may be more aggressive than OPA-90.

This initiative by the EU, I think, raises several questions for Congress and for industry to examine at this point. We would ask, will the accelerated EU single-hull retirement schedule create a shipping problem, a shortage of hulls to supply the crude oil that we need to support our needs here domestically?

The second question may be, what is the status of the domestic energy transportation needs as OPA-90 deadlines approach us? And should—the third question being, should OPA-90 be modified

or adjusted relative to the action taken by the EU?

This is our comment relative to those questions. As we see it, in the global marketplace, there is sufficient ship construction capacity to meet the deadlines that are under discussion in the EU. The entire global fleet, about 1600 tankers, could be replaced in a timeframe of only 7 years. About half of that fleet is already in the double-hull configuration.

So, while we see the market being impacted, and perhaps the cost of transportation being impacted, we believe that the ship industry, the ship construction capacity, is out there to construct and

deliver these new vessels.

Relative to the second question, in the domestic petroleum markets, we see a mix of circumstances and we want to point out a few of those to you. There has been a very significant launching of new vessels in the market of tank barges. Based on our statistics, we believe about 60-65 percent of the large coastwise tank barge fleet is OPA-compliant today. We believe, based on construction to date, the progression of new double-hull tank barges going into service is going to readily meet the OPA deadlines, and we feel very confident that that aspect of the industry will be ready.

In the ship community, there are more questions about the availability of new double-hull vessels being available to meet the OPA-90 deadlines. Very few new vessels have been built. At this date, approximately 40 percent or so of the active tonnage is doublehulled, and there are very few or no contracts pending for new vessels at this time. I want specifically to say that, with respect to new product tankers, there have been no contracts signed since the

mid-1990's.

There are factors that come to bear relative to these circumstances. The oil majors are not offering long-term charter and transportation agreements to the owner-operators of ships. Economic profits are obviously very substantial for those that choose to continue to use these single-hull vessels until the bitter end.

The liability for environmental damage is focused on the vessel owner and operator. Charterers, oil companies, producers, brokers, other people involved in the distribution of petroleum products, can limit their liabilities, and perhaps the analogy of the Japanesebuilt ship that is now registered in one country and managed by a company in another country is a good analogy.

Charterers in most cases, being in business to make a profit, will utilize the lowest-cost transportation and I think the economic forces there are obvious.

It is also a fact that markets are changing. The patterns of oil distribution are shifting. Supply and demand is moving. Clearly, some of the markets that were traditionally served by self-propelled tankers may be better-served more economically with today's newest tank barge and they are doing a marvelous job in many markets.

The question concludes with, can the U.S. shipbuilding industry meet the need to build the projected tankers? Yes, we believe absolutely that is possible. Assuming conservatively that perhaps 15 tankers could be ordered, the industry could easily supply those over the next 5 years or so. The fact that the barge operators have ordered and received 32 large barge units in the last 3 years is evidence and affirmation of what our capabilities are. The same thing can be done with the ships.

We believe that Congress must send a clear message to everyone concerned that U.S.-built ships, U.S.-owned and U.S.-crewed double-hull vessels will be used to move our oil and our oil products along our coastlines and our river systems, and that there will not be the possibility of extension, or waiver, or modification of the OPA-90 deadlines. I know there has been a lot of discussion in industry, maybe not recently, but over the years since OPA was implemented, is there any possibility that those dates might be stretched?

Congress may want to consider some additional measures to ensure that vessel safety and compliance is encouraged to be prompt and timely. For instance, we specifically would suggest that Congress consider implementing more stringent inspection requirements for vessels of a certain age, perhaps 15 years and older. That seems to be in step with what the EU is considering.

We would also consider—would offer that Congress may need to revisit the structure of liability law to consider how we can clarify where the liability runs if a vessel does encounter a problem and spill oil. Charterers and other types of entities that are involved in this process should all equally share in whatever risk and liabilities there may exist.

Further, we would maybe make a suggestion that Congress go back and look at reenacting some assessments on cargo moved in single-hull tonnage, and deposit those collections in the oil spill liability trust fund. This would create a clear economic incentive for owners to go ahead and make the transition to double hulls as soon as possible.

Last, I would make one further comment, and that is with respect to the fact that we are concerned that the U.S. flag tanker fleet is not well-prepared to serve this country's military needs that are upcoming. There are studies on the record from the Military Sealift Command of the Navy and the United States Maritime Administration that project a significant shortage of double-hull tanker capacity in as early as 2005. Our military sealift requirements are critical, and failure to address those needs could have dire implications for our security here at home.

In closing, the Shipbuilders Council appreciates the opportunity to testify, Mr. Chairman, and I would be very happy to answer any questions you may have.

[The prepared statement of Mr. Godfrey follows:]

PREPARED STATEMENT OF TOM GODFREY, PRESIDENT, COLONNA'S SHIPYARD, INC.; CHAIRMAN, SHIPBUILDERS COUNCIL OF AMERICA

Good Afternoon Mr. Chairman and Members of the Committee. My name is Tom Godfrey and I am President of Colonna's Shipyard in Norfolk, Virginia. Colonna's Shipyard is a 128-year-old family owned business currently engaged in commercial

and Navy ship repair and new barge construction activities.

I am also the Chairman of the Shipbuilders Council of America. SCA is the oldest and most broad based trade association representing all sectors of the commercial shipyard industry. Founded in 1920, SCA today represents 71 shipyard companies that own and operate over 150 shipyards in 24 states and employ approximately 35,000 workers. Our member companies build and repair America's commercial vessel fleet as well as support vessels for the U.S. military, U.S. Coast Guard vessels and other small and mid-sized government craft. We also repair and maintain Navy combatant ships, vessels in the National Defense Ready Reserve Fleet and other vessels needed to maintain our military readiness.

Mr. Chairman, the spate of recent oil spills around the world and the reaction to those spills in the European Union and elsewhere is proof that Congress took the right course when it enacted the Oil Pollution Act of 1990 ("OPA-90") in response to the EXXON VALDEZ disaster. In its simplest terms, that law mandates that all vessels calling at U.S. ports be double-hull by 2015. The environmental benefit of moving petroleum product in double-hull vessels far outweighs the negligible cost to the consumer that the double-hull requirement imposes. It is estimated that the to the consider that the double-find requirement imposes. It is estimated that the total transportation cost of refined petroleum product moving from the Gulf of Mexico to New England is less than \$.07 per gallon, a small price to pay to protect our coastlines from potentially devastating oil spills.

It has taken the EU two major spills and several minor ones over the last few years to make the difficult economic and political decisions you made in 1990. Recent spills off the coasts of France and Spain could have been prevented, or at least minimized with more modern, double-hull ships. The most recent accident which occurred in the English Channel last week was minimized to some extent because the vessel in question was double-bottomed. Some have suggested that the spill could have been minimized even more with a vessel that was entirely double-hulled. No vessel, or any form of transportation for that matter, can protect 100 percent against potential spills, but double-hulls are safer under most circumstances.

Now the Europeans in reaction to these spills are likely to take action, which will almost assuredly create more comprehensive protections against spills in EU waters than enacted in the OPA-90 law. Specifically, the EU proposals would prohibit carriage of heavy fuel oil in single-hull vessels immediately; ban single-hull vessels more than 23 years old immediately; phase-out all single-hull tonnage by 2010; and, require vessels 15 years old to comply with more frequent and stringent inspection requirements. Individual European countries are considering even tougher actions such as banning all single-hull vessels from their ports immediately.

This new EU action raises several questions:

- Will accelerated EU phase-outs create a tonnage shortage in the international market, which could constrain the ability of the U.S. to import crude and/or petroleum products?
- What are our domestic energy transportation needs and are we doing what is necessary to ensure that adequate environmentally safe petroleum product transportation will be available under the OPA-90 requirements?
- Should the OPA-90 retirement schedule be accelerated to meet or exceed EU plans and what would the impact of an accelerated phase-out schedule be?

Accelerated retirement schedules being considered by the EU will not create a petroleum transportation crisis worldwide. There is sufficient capacity to build tankers worldwide. Analysis performed by Poten & Partners, a well-known energy and transportation brokerage and consulting firm, estimates that the entire world tanker fleet of 1654 vessels can be replaced every 6.6 years given current shipbuilding capacity worldwide. In fact, Poten & Partners reports that 107 tankers have been delivered in the last four years and that 70 large tankers are on order, and this before the EU enacted an accelerated phase-out requirement. International-flag operators have for some time been taking advantage of subsidized construction prices, mostly in Asian shippards, to add to their tanker fleets well in advance of international regulations requiring them to do so.

The result of this added tonnage is overcapacity in the oil transportation sector and depressed shipping rates as more double-hull tonnage is added to the international marketplace, while international owners try desperately to keep single-hull vessels operating for as long as possible. Until now, there simply has not been a clear and unequivocal signal to the world that old tonnage must be retired. As long as domestic and international charterers are unwilling to pay a premium for transportation in modern, double-hull vessels, operators will continue to utilize all single-hull tonnage available, much of which is registered in "flags of convenience" states that pose significant security risks when they call on U.S. ports and around the world.

While an accelerated phase-out of single-hull tank vessels servicing European markets should not create an insurmountable shortage of vessels available elsewhere, additional vessel retirements especially of older, cheaper tonnage is expected to put upward pressure on international shipping rates potentially affecting decisions on whether to import or produce petroleum product at home through efforts such as the opening of ANWR. Higher international shipping costs could lead to more domestic production and increased domestic shipping demands.

The larger question in my opinion, Mr. Chairman, is whether there will be sufficient U.S.-flag, double-hull capacity to meet domestic petroleum product transportation requirements. It has been a dozen years since OPA-90 was enacted and much remains to be done with the first major phase-out date for large, ocean-going tank vessels less than two years away.

Demand for coastwise petroleum product movement is difficult to project with certainty. Weather, economic activity, the cost of petroleum overseas, and other transportation options all impact demand for coastwise transportation; however, a private study cited by the National Research Council in 1998 estimates that approximately 4.150 million deadweight ton (dwt) or roughly 29 million barrels of capacity (tanker and tank barge) will be needed to meet domestic coastwise petroleum transportation requirements in 2005. These projections do not include transportation of crude oil from Alaska, nor do they take into account military requirements. ¹

¹Statistics in this testimony do not include vessels that service the Alaska crude oil market. Vessels constructed for the Alaskan trade are significantly larger than those needed for domestic coastwise petroleum product transportation and are prevented by the economics of operating larger vessels from being interchangeable with vessels utilized in the coastwise trades.

		Pr	oduct Tankers ²		
	Double-H		Othe	The second secon	Total Capacity
SIDSESV	# of Vessels	DWT	# of Vessels	DWT	DWT
2005	21	815,000	29	1,297,000	2,112,000
2006	21	815,000	25	1,118,000	1,933,000
2007	21	815,000	25	1,118,000	1,933,000
2008	21	815,000	22	1,002,000	1,817,000
2009	21	815,000	22	1,002,000	1,817,000
2010	21	815,000	22	1,002,000	1,817,000
2011	21	815,000	16	723,000	1,538,000
2012	21	815,000	10	457,000	1,272,000
2013	21	815,000	6	265,000	1,080,000
2014	21	815,000	THE YEAR 1	46,000	861,000
2015	21	815,000	0	0	815,000

Tank Barges < 5,000 gross tons³

	Double	-Hull	Othe	LAUTH STREET	Total Capacity
	# of Vessels	DWT	# of Vessels	DWT	DWT
2005	69	1,233,000	43	707,000	1,940,000
2006	69	1,233,000	36	570,000	1,803,000
2007	69	1,233,000	30	462,000	1,695,000
2008	69	1,233,000	25	344,000	1,577,000
2009	69	1,233,000	23	318,000	1,551,000
2010	69	1,233,000	16	205,000	1,438,000
2011	69	1,233,000	16	205,000	1,438,000
2012	69	1,233,000	16	205,000	1,438,000
2013	69	1,233,000	16	205,000	1,438,000
2014	69	1,233,000	16	205,000	1,438,000
2015	69	1,233,000	0	0	1,233,000

Total Tank Vessel Capacity/Demand (DWT)⁴

	Double-Hull	Other	Total	Projected Demand	Building Requirement
2005	2.048.000	2.004.000	4.052.000	4,150,000	98,000
2006	2,048,000	1,688,000	3,736,000	4,215,000	479,000
2007	2,048,000	1,580,000	3.628.000	4,281,000	590,000
2008	2,048,000	1,346,000	3.394.000	4,347,000	953,000
2009	2,048,000	1,320,000	3,368,000	4,415,000	1.047.000
2010	2,048,000	1,207,000	3.255.000	4,484,000	1,229,000
2011	2,048,000	928,000	2,976,000	4,554,000	1,578,000
2012	2,048,000	662,000	2.710.000	4.625.000	1,915,000
2013	2,048,000	470,000	2,518,000	4,697,000	2,179,000
2014	2,048,000	251,000	2,299,000	4,770,000	2,471,000
2015	2,048,000	0	2,048,000	4,844,000	2,796,000

 $^{^2} Sources:$ U.S. Maritime Administration, 2001; Clarkson's Tanker Registry, January 1, 2000. $^3 Sources:$ U.S. Corp of Engineers, Master File, 2001; coltoncompany.com, U.S.

Maritime Administration, 2001.

4Demand: Wilson, Gillette & Co. (as cited in *Double-Hulled Tanker Legislation: An Assessment of the Oil Pollution Act of 1990*, National Research Council, 1998.

Today, there is approximately 815,000 dwt (21 tankers) (roughly 5,705,000 barrels) of double-hull capacity in the domestic coastwise self-propelled tanker fleet. Of this available tonnage, only 456,000 dwt (11 tankers) was built or rebuilt after OPA-90 was enacted and 359,000 dwt (10 tankers) of this capacity will be 20 years old or older in 2005. In addition to the double-hull self-propelled tonnage available, better as an additional 1,297,000 dwt (29 product tankers) of single-hull or double-bottom capacity will be available in 2005. ⁵ Total coastwise tanker capacity in 2005 will be 2,112,000 dwt under the current retirement schedule

If the U.S. were to enact policies similar to the EU proposal and ban non doublehull tankers more than 23 years old from U.S. coastwise trade, all but one of the non double-hull U.S. flag tanker fleet would be forced into retirement by 2007. OPA-90 currently does not prohibit trade by double-hull vessels regardless of their age. The lack of double-hull tanker replacement construction and the age of the fleet that can remain in service under OPA-90 clearly illustrates that we are fast approaching a crisis point, and as the experience in Europe has shown there is clearly

a greater risk of disaster with older single-hull vessels.

The one bright spot in this picture has been U.S.-flag tank barge operators who have been much more responsive to OPA-90 retirement schedules and requirements than those operating self-propelled vessels. U.S. shipyards and tank barge operators have worked together to develop new technologies such as articulated tug/barges (AT/Bs) to meet coastwise petroleum transportation requirements. AT/Bs are less expensive to build and operate than self-propelled tankers. They are safer and faster than traditional tug/barges or even integrated tug/barges. ⁶ Almost every large tank barge constructed in the last five years has been built in the AT/B design. Today, operators are considering even larger AT/Bs, equivalent in size to a handy-size product tanker, to replace portions of the self-propelled tanker fleet.

Since OPA-90 was enacted, U.S.-flag tank barge operators have built or con-

tracted for 48 large coastwise tank barges equaling roughly 800,000 dwt (5,665,000 barrels) of capacity. In the last three years alone, U.S.-flag coastwise tank barge operators have ordered 32 large ocean-going barges with a capacity of 530,000 dwt from U.S. shipyards. There is 543,000 dwt of double-hull tank barge capacity built rom U.S. snipyards. There is 545,000 dwt of double-hull tank barge capacity built prior to 1990 in the marketplace. In addition to double-hull tonnage, an additional 1,012,000 dwt (40 barges) of large ocean-going tank barge capacity will remain available for coastwise movements in 2005, bringing total U.S.-flag tank barge capacity in 2005 to approximately 1,940,000 dwt (13,580,000 barrels).

Total coastwise tank vessel—tankers and barges—capacity in 2005 assuming all vessels currently under contract are delivered will be approximately 4,052,000 dwt, approximately 100,000 dwt below projected demand. The shortfall grows to 756,000 dwt by 2008 assuming no growth in transportation demand and the OPA-90 retirement schedule remains unchanged. The shortfall will grow to 953,000 dwt assuming the modest growth in coastwise petroleum transportation demand projected in the National Research Council analysis. To put these numbers into perspective, 953,000 dwt equates to approximately (10) 40,000 dwt self-propelled product tankers, (6) 280,000 barrel AT/Bs, (6) 150,000 barrel barges, (10) 100,000 barges, and (10) 80,000 barrel barges.

Can U.S. shipyards build the tonnage needed to meet demand by 2008? The answer is yes as long as vessel operators place orders in a timely and orderly manner. Indeed, if they would approach it in this way, significant cost reductions could be obtained through series construction efficiencies. Seven shipyard companies are building/converting or have recently delivered large ocean-going tank barges. There are several additional shipyards with the capabilities and infrastructure needed to build tank barges in the range of 150,000 barrels or below if the demand requires it. There are at least six shipyards today that have the capability to build larger—280,000 barrel range—AT/Bs. Construction of these larger "handy-size tanker equivalent" AT/Bs is expected to take 12 to 14 months with follow-on vessels every four

to six months.

The number of shipyards with the capacity today to build self-propelled tankers is smaller. There are currently three commercially-oriented shipyards capable of beginning construction of self-propelled tankers immediately and several others have expressed interest in this market, but they are either engaged in ship construction of another type or would require facility modifications. Construction of the first of

⁵This includes six 46,000 dwt integrated tug/barges classified as tankers by the Coast Guard and the Corp of Engineers. These vessels phase-out under OPA-90 in 2012, 2013, and 2014. ⁶AT/B systems allow the tug to connect into a notch built into the barge with a fixed connection that enables the tub and barge to move independently of each other. Integrated tug/barge systems look similar but have a rigid connection which does not enable independent movement of the tug and barge.

a series of 40,000 dwt product tankers will take 20 to 24 months to complete depending on engineering and design requirements. Follow-on vessels can be delivered every four to six months thereafter. The first ships can be delivered in 2005 assuming contracts materialize very soon. U.S. shipyards can deliver at least a dozen product tankers by 2007; however, this simply cannot be achieved if U.S. owners persist in delaying investments in new tonnage. In our view, failure to sign construction contracts within the next 12 months will make it virtually impossible for new tonnage to be delivered in advance of the current OPA retirement schedule.

Mr. Chairman, there has been some discussion over whether the U.S. should accelerate vessel phase-outs under OPA-90 in reaction to likely actions by the EU. This is a decision that ultimately lies with Congress, but I would ask you to consider that a large number of tankers and large tank barges must be built over the next several years to meet the current OPA-90 retirement schedule and to consult with the vessel operator and shipbuilding industries before taking any such action.

Because the commercial marketplace does not differentiate in rates between new vessels and older, fully depreciated assets, commercial operators are in effect encouraged to keep old tonnage operating for 25 years and beyond. We ask you today to send a clear message to the marketplace that Congress and the American people will not tolerate any delay in complying with the OPA-90 dictate that petroleum product must be moved in modern, double-hull, U.S.-flag tonnage. In fact we would ask you to consider options to encourage voluntary compliance more quickly than the current law requires, such as extending the liability, to a greater extent, for future damages to the oil producers, refiners and distributors. You might also consider reinstituting the assessment on petroleum product moved in single-hull vessels with the assessment to be deposited into the Oil Spill Liability Trust Fund. This would bring the transportation cost for product moved in newer, more expensive double-hull vessels into parity with the cost of using older, fully depreciated, vessels. We would also ask you to consider requiring a more comprehensive and frequent inspection regime, similar the EU proposal, for U.S.-flag vessels to ensure that all vessels used to move heavily pollutant cargoes are in sound condition.

Mr. Chairman, my testimony focuses primarily on the OPA-90 law as it relates

Mr. Chairman, my testimony focuses primarily on the OPA-90 law as it relates to supply and demand of the domestic coastwise petroleum transportation market from the shipbuilders perspective. I would; however, be remiss if I did not at least mention the importance to our military readiness of an adequate U.S.-flag tanker fleet. Our armed forces depend on a mix of vessels in the Military Sealift Command (MSC), the National Defense Ready Reserve Fleet, U.S. flag commercial fleet and "Effective U.S. Control" 7 fleet to meet sealift readiness requirements. Recent studies by MSC and the U.S. Maritime Administration project significant tanker capacity shortages as early as 2005 for this critical sealift need based on single-hull retirements in all of these fleets. We must find a way (other than through reflagging of foreign built vessels) to ensure adequate U.S.-flag tank vessel tonnage to meet our

commercial and military needs.

Mr. Chairman, I want to thank you for holding this hearing today. America's commercial shipyards stand ready to construct vessels necessary to meet our domestic petroleum transportation requirements in an efficient manner. Very few issues are as important to our economic and national security as our access to oil and petroleum products and our ability to transport these products on U.S.-built, U.S.-owned and U.S.-crewed vessels.

In closing, Mr. Chairman, I urge the Committee to send a clear message to the marketplace that Congress will not under any circumstance consider any delay in the double-hull requirement in the OPA-90 law.

Thank you and I will be happy to answer any questions.

The CHAIRMAN. Thank you, sir. Mr. Sandalow, welcome.

STATEMENT OF DAVID SANDALOW, EXECUTIVE VICE PRESIDENT, WORLD WILDLIFE FUND

Mr. Sandalow. Thank you, Senator. With your permission, I will submit my written statement for the record.

The CHAIRMAN. Without objection.

⁷ EUSC fleet is made up of vessels owned by U.S. citizens but operated under the flags of the Marshall Islands, Honduras, Liberia, Panama and the Bahamas.

Mr. Sandalow. I am pleased to be here today to testify on behalf of the World Wildlife Fund, one of the largest nature conservation organizations in the world. WWF currently works in more than 80 countries, thanks to the support of 1.2 million members in the United States, and more than 5 million members worldwide.

Mr. Chairman, I come here today with a simple message: There are reasonable and prudent steps that we should take to protect our oceans from major oil spills. In this oral statement, I will recommend two such steps: first, accelerating the phase-out of single-hull tankers; and second, of critical importance, building a network of "no go" zones in our oceans that are off limits to tanker traffic.

Mr. Chairman, the sinking of the tanker PRESTIGE off Spain in November grabbed the attention of millions around the world. But what is most striking about this accident is its familiarity. Since the EXXON VALDEZ ran aground roughly 13 years ago, large spills have continued to take their toll on coastal communities and fisheries around the world.

In 2001, for example, the Ecuadoran ship, JESSICA, spilled diesel and bunker fuel into the sea off the Galapagos Islands, imperiling one of the world's great ecological treasures. In November 2000, a single-hull tanker dumped 550,000 gallons of Nigerian crude oil near Port Sulphur in the Gulf of Mexico. In the past decade, eight tankers have accidentally spilled at least 1 million gallons of oil into the world's oceans.

The costs of these spills are enormous. Consider: 550 miles of coastline, the entire Atlantic coast of the Spanish province of Galicia, have been closed to fishing and shellfish-gathering since the PRESTIGE spill, affecting 90,000 people whose livelihoods depend directly on these activities. The damages associated with the EXXON VALDEZ spill have been estimated to exceed \$2 billion. And although the United States has taken important steps in the past to prevent similar disasters, most notably by passing OPA, we must do more.

I will speak very briefly today to two steps that we can take. First, we must eliminate the riskiest vessels. Present U.S. and international law calls for the phase-out of single-hulled tank vessels by 2015. Yet incidents like the PRESTIGE remind us that we are still at risk, and that 2015 remains a long ways off. Today the majority of tankers carrying oil out of VALDEZ are still not double-hulled. As late as this summer, the average age of tankers in the Trans-Alaska Pipeline trade between VALDEZ and the U.S. West Coast was 20.5 years.

Accelerating the elimination of single-hulled vessels is a good idea whose time has come. Knowledgeable observers note that a quicker timetable is realistic. An OECD report suggested a phase-out in the next 7 to 9 years may be possible. The United States should carefully consider such advice and support the quickest possible removal of single-hull tankers both in our home waters and abroad.

Second, Mr. Chairman, and very critically, we should build a global network of "no go" zones in our world's oceans. Even under an accelerated phase-out timetable and other measures that have been discussed today in this hearing, single-hulled and unsafe ves-

sels will continue to pose a threat to marine biodiversity and coast-

al commerce for years to come.

Moreover, double-hulled tankers, although they do better than single-hulls in preventing pollution, are by no means a panacea, as Mr. Cox has said before me on this panel. Accordingly, we urge the United States to play a leadership role in establishing a global network of "no go" zones where tanker traffic would be prohibited.

IMO rules provide an important mechanism for the designation of such zones, known as Particularly Sensitive Sea Areas, PSSA's. Our Nation should be active in promoting the use of this important tool by the IMO. In our own waters, we should seek "no go" zone status for areas that are critical to the ocean web of life, or of special importance to commercial and recreational fishermen and others who rely on the sea.

As a starting point, the United States should strongly consider petitioning the IMO for special protection of: first, areas of special importance to the economy of coastal communities, including places designated as essential fish habitat under the Magnuson-Stevens Fishery Conservation and Management Act; and second, areas of special biological importance, such as our national marine sanctuaries. These "no go" zones can make a huge difference in protecting the world's oceans.

Mr. Chairman, WWF thanks you and the Members of the Committee for the opportunity to testify today. We stand ready to assist the Committee in shaping constructive solutions to the serious continuous constructive solutions.

tinuing problem of major oil spills in the world's oceans.

Thank you.

[The prepared statement of Mr. Sandalow follows:]

Prepared Statement of David Sandalow, Executive Vice President, World Wildlife Fund

Introduction

Mr. Chairman and Members of the Committee, thank you for the opportunity to testify today. I am David Sandalow, Executive Vice President of the World Wildlife Fund. WWF is the largest private conservation organization working internationally to protect wildlife and wildlife habitats. We currently sponsor conservation programs in more than 100 countries, thanks to the support of 1.2 million members in the United States and more than 5 million members worldwide.

WWF has a keen interest in the issue before this Committee. With offices and programs around the world, we have too often witnessed first hand the devastating effects of tanker spills on marine wildlife. WWF has a major presence in Spain, and is playing a significant role in the wake of the PRESTIGE spill. WWF experts are helping train volunteers to clean oil-covered birds, advising authorities on wildlife rescue and treatment and coordinating volunteers cleaning beaches and rescuing animals.

The Cost of Inaction: Long Time No Sea

The sinking of the tanker PRESTIGE less than two months ago reminded us once again of the grave risk posed by irresponsible shipping to the marine environment and coastal communities. As the tragedy in Galicia unfolded, Americans recalled the disastrous grounding of the EXXON VALDEZ thirteen years ago and the ecological nightmare that was its aftermath. These incidents are but two examples in a long line of accidents involving oil tankers. Their effect on the web of life in our oceans—and on the millions of people who derive their livelihoods from it—has been both incredibly destructive and long-lived. Remarkably, we seem to forget these biological and human impacts soon after each incident disappears from the front page. And their costs to nature and coastal economies are discounted each time we formulate policies to prevent future spills.

It is time for a more honest reckoning of the cumulative price we have paid for ignoring the problem of sub-standard shipping. As we weigh the need for new poli-

cies to prevent spills in the wake of the PRESTIGE disaster, we must base our decisions on a full accounting of these costs. Too often the price tag of more effective regulation has been amplified while the biological effects of inaction, not to mention the hard economic costs of oil spills, have been given short shrift. Clearly there are real costs associated with more rigorous tanker inspection requirements and better vessel design standards; but they are more than outweighed by the price we have paid for adhering to the status quo. Some cases in point include:

- 550 miles of coastline (the entire Atlantic coast of Galicia) have been closed to
 fishing and shellfish gathering since the PRESTIGE spill, affecting 90,000 people whose livelihood depends directly on these activities. Galicia accounts for 40
 percent of the total Spanish fish catch (it is the foremost fishing region in all
 of Europe). Experts estimate economic and environmental recovery in the region
 will take at least a decade.
- Damages associated with the EXXON VALDEZ spill exceeded \$2 billion. The spill's environmental toll is still being felt today. Of the 28 species and resources studied since the spill, recovery objectives have only been met for seven.

Although the United States has taken important steps in the past to prevent similar disasters—most notably by passing the Oil Pollution Act of 1990—we must do more. Single-hulled tankers still pose a direct threat to America's marine environment. Our most valuable ocean areas remain unprotected. In addition, we must recognize that America has a direct stake in the health of the global oceans. Our interests at home are affected in many ways by activities that take place far from our shores. Much of the fish that we consume in the United States is produced elsewhere. Many of the jobs in our seafood sector depend on the productivity of fisheries located on the opposite side of the globe. The prevention of oil spills in foreign waters is in keeping with our own national interests.

WWF supports a three-part prescription for preventing future disasters like the PRESTIGE incident, and minimizing the impact of accidents that do occur. We must accelerate the removal of substandard tankers from ocean commerce, speeding up the timetable for phasing out single-hulled vessels to the extent practicable. We must insist on a system of real accountability for oil transport at sea, focussing on a more effective regime for tanker inspection and new mechanisms that ensure real flag state responsibility. Finally, we must take steps to protect our most valuable ocean areas by making them "off limits" to tanker traffic.

Eliminating the riskiest vessels

Present U.S. and international law calls for the phase-out of single-hulled tank vessels by 2015. This requirement is the centerpiece of the Oil Pollution Act of 1990, and the most significant shift in policy associated with the EXXON VALDEZ spill. Yet incidents like the PRESTIGE sinking remind us that we are still at risk and that 2015 is a long way off.

Today, the majority of tankers carrying oil out of Valdez are still not double-hulled. As late as this summer, the average age of tankers in the Trans-Alaska pipeline trade between Valdez and the U.S. West Coast was 20.5 years. And outside of the United States, "garbage ships" like the PRESTIGE transport oil through sensitive ocean areas every day.

Given the biological, economic and human costs of disasters like the PRESTIGE spill, accelerating the elimination of single-hulled vessels is a good idea. Knowledge-able observers note that a quicker timetable is not unrealistic: an OECD report suggests that a phase-out in the next seven to nine years may be possible. The United States should carefully consider such advice and support the quickest possible removal of single-hulled tankers, both in our home waters and abroad.

Ensuring International Accountability

The current approach to setting international standards for shipping has tended to be reactive, ponderous and based on industry-driven compromises. Even where rules have been agreed on internationally, ensuring compliance has been a major problem. Enforcement of shipping regulations relies largely on the actions of flag states. Many flag states take these responsibilities seriously but some—often referred to as flags of convenience (FOC)—profit from allowing foreign ship operators to register vessels in their nation's name but fail to effectively oversee the ships that fly their flag. The FOC system turns ship registration into a business and creates a competitive advantage for states that allow sub-standard shipping practices. The PRESTIGE spill was in large measure a product of this system.

Ultimately, the major weaknesses that exist in current accountability mechanisms can only be addressed through the fundamental reform of international law. In the best of worlds, this would involve revisiting the relevant provisions of the United

Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Convention on the Conditions for Registration of Ships. In the shorter term, expedited consideration of the proposals that have emerged since the PRESTIGE incident for beefing up vessel inspections should be a priority—as should new measures to require that the details of ownership and management of ships be fully transparent. The PRESTIGE story demonstrates that current arrangements make it very difficult to identify the real owners of vessels and hold them accountable.

Protecting Sensitive Ocean Areas from Future Spills

Even under an accelerated phase-out timetable, single-hulled vessels will continue to pose a threat to marine biodiversity and coastal commerce for a decade. Moreover, although casualty data demonstrates the positive impact of double-hulled tankers in preventing pollution, they are not a complete panacea. So while WWF strongly supports a stepped-up effort to eliminate substandard vessels and strengthen inspection protocols and design standards, we also recognize that these initiatives can not prevent oil spills altogether—and may do little to eliminate spills in the short-term.

Accordingly, we urge the United States to play a leadership role in establishing a global network of "no go" zones where tanker traffic is prohibited. International Maritime Organization rules provide an important multilateral mechanism for the designation of such zones, known as Particularly Sensitive Sea Areas (PSSAs). PSSAs are areas of the ocean that need special protection because of their ecological or economic significance and their vulnerability to the harmful impacts of shipping activities. Within these areas shipping traffic can be more carefully regulated, or prohibited altogether. Coastal nations may petition the IMO to have important sea areas recognized as PSSAs—a process that assures designations will reflect national priorities as well as international interests in maritime commerce. Our nation should be more actively promoting the use of this important conservation tool by the IMO.

In our own waters, we should seek PSSA status for areas that are critical to the ocean web of life, or of special importance to commercial or recreational fishermen and others who rely on the sea. As a starting point, the United States should strongly consider petitioning the IMO for special protection of:

- Areas of recognized biological importance, such as our national marine sanctuaries, and
- Areas of special importance to the economy of coastal communities, including places designated as essential fish habitat under the Magnuson-Stevens Fishery Conservation and Management Act

Conclusion

In closing, Mr. Chairman and Members of the Committee, WWF wishes to express our gratitude for your active interest on oil spills and protecting the marine environment from their impacts. We stand ready to assist the Committee in providing constructive solutions to this serious problem. I am happy to answer any questions you may have.

The CHAIRMAN. Thank you very much.

Mr. Rauta, please help me with the pronunciation.

STATEMENT OF DRAGOS RAUTA, TECHNICAL DIRECTOR, INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER **OWNERS (INTERTANKO)**

Mr. RAUTA. Thank you very much, Mr. Chairman. Good after-

noon, Mr. Chairman. My name is Dragos Rauta.
The CHAIRMAN. "ROU-tah," thank you.
Mr. RAUTA. Yes. I am the Technical Director of INTERTANKO and U.S. representative of INTERTANKO. INTERTANKO is a trade association representing a majority of the world tanker owners and operators. Our members operate more than 2,000 tankers. This is more than 70 percent of the world's independent fleet. INTERTANKO ships fly the flags of more than 40 countries, including the United States, and transport more than 60 percent of all the oil and petroleum products imported into the United States each year.

INTERTANKO appreciates that this Committee has taken an interest in international maritime safety issues so early in this Congress. We are pleased to be able to appear here this afternoon. I have submitted for the record a more complete statement. In this short oral presentation, I would only highlight a few points, particularly in light of recent European actions that follow the loss of vessel PRESTIGE.

First, the international nature of the marine transportation system means that effective marine safety measures must be developed and accepted globally. No one nation or region can unilaterally decree new safety or prevention measures without having impacts, many of them potentially negative, in other nations or regions.

Second, while there is an understandable political impulse to react immediately to issues raised by marine or aviation casualties, this impulse must give way to the need for accurate information about the cause of a casualty and to efforts to gain international consensus on remedial measures.

Third, unilateral European bans on the carriage of particular types of petroleum and proposals for accelerating double-hull requirements undermine existing international safety mechanisms and, more immediately, threaten to fragment artificially the international oil transport markets. If there are remedial measures that are clearly suggested by the causes of the PRESTIGE spill, they should be placed before the International Maritime Organization and applied globally. Arbitrary restrictions on cargoes, vessels' ages, and vessel designs, for example, double hulls versus single hulls, bear little connection to what is currently known about the cause of this incident.

Fourth, although we all understand the desire of the governments of coastal nations affected by the PRESTIGE disaster to appear decisive, there is no justification for interference by those nations with the right of freedom of passage through their exclusive economic zones, a right enshrined in the United Nations Convention of the Law of Sea and established by international public law. The maritime nations of the world, particularly the United States, must speak forcefully against French and Spanish interference with the lawful activities of vessels that conform to all internationally accepted safety standards. Well-established principles of freedom of passage must be defended for the benefit of all nations, including the United States.

Fifth, maritime nations must give urgent attention to the designation of ports of refuge. Never should a ship in distress like the PRESTIGE be forced out to sea to break up when there exists a chance of moving into sheltered areas where damage can be contained. With regard to the PRESTIGE, it should be noted that its cargo tanks were substantially intact at the time the ship was warded out to sea. Had it not been forced out by Spanish authorities, the resulting pollution and areas impacted very likely would have been a small fraction of what we experienced.

Sixth, before new measures are created we must inquire whether existing flag and port state obligations are being properly implemented. INTERTANKO has worked in partnership with the United States Coast Guard to promote effective port state control in the United States. We hope that this success can be repeated in other

nations' ports.

Finally, the inclination in the United States and abroad to treat marine casualties as criminal matters is bad policy and harmful to efforts to protect ships, crews, and the marine environment. Absent gross negligence or willful misconduct, no officer or crew member should be incarcerated because a ship has been lost or damaged at sea. No response to a casualty should be compromised by fear of fines or imprisonment. No investigation should be complicated by concerns that honest answers will land people who have done no intentional harm in jail.

Shipowners in the United States and other nations have incurred enormous expenses in modernizing their fleets and in ensuring the safe operation of their vessels. The pace of double-hull conversions worldwide is testimony to the immense capital commitments that shipowners have borne to meet current legal requirements, and to improve the quality of their fleets. Safety has advanced considerably over the past 20 years. Continued progress depends on the diligent daily efforts of shipowners and crews. National and regional governments must act responsibly to protect the benefits of these efforts.

Thank you for your interest in these important issues. I will answer any questions you may have to the best of my ability. I assure you that INTERTANKO will continue—as it has for many years—to make its expertise available to the Congress and the administration. We have made substantial progress and look forward to continuing improvements in the efficient maritime transportation of the commerce of the United States.

The CHAIRMAN. Thank you, Mr. Rauta, and your complete statement will be made a part of the record.

The prepared statement of Mr. Rauta follows:

PREPARED STATEMENT OF DRAGOS RAUTA, TECHNICAL DIRECTOR, INTERNATIONAL ASSOCIATION OF INDEPENDENT TANKER OWNERS (INTERTANKO)

Good afternoon. I am Dragos Rauta from the International Association of Independent Tanker Owners (INTERTANKO). INTERTANKO is an international trade association representing the majority of the world's tanker owner and operators. INTERTANKO has 239 members controlling some 2,050 tankers with a total of 157.7 million tons deadweight (dwt) capacity. INTERTANKO members represent approximately 70 percent of the world's independently owned tanker fleet above 10,000 dwt. Tankers operated by INTERTANKO's members transport more than 60 percent of the oil and petroleum products imported into the United States. In addition to its full members, INTERTANKO also has 287 companies which are associate members. INTERTANKO has offices in Oslo, London, Singapore and Washington, DC.

INTERTANKO appreciates the opportunity to be here today to discuss the implications of the recent marine casualty involving the tanker *PRESTIGE* off the coast of Spain. INTERTANKO is recognized as a leading advocate of tanker safety by national and international public and private organizations around the world. Our program emphasis has been on finding meaningful safety measures based on sound technology and procedures that can be applied globally to protect our crews, our ships and the global marine environment.

I. PRESTIGE Accident

INTERTANKO is grateful that the crew of the *PRESTIGE* is safe, due primarily to prompt and successful rescue operations conducted by Spanish maritime authorities. We also note the bravery of the Master and his two senior colleagues who re-

mained on board in efforts to save their ship. INTERTANKO also commends the oil spill response efforts being undertaken by national and private entities to prevent and minimize environmental damages from this accident.

The PRESTIGE accident has caused major economic impacts to persons who earn their living from the sea. While prevention must always be the first goal of government and industry, INTERTANKO is keenly ware of the human and environmental costs of marine oil spills. INTERTANKO champions continual review of the resources and technologies available for response and for support of those whose work

and property are affected by these casualties.

As in the case of any marine casualty, a complete and thorough inquiry into the causes of the accident must be pursued. Currently, none of us, and indeed no one in Europe, knows with precision what caused the loss of the *PRESTIGE*. Until we know the cause of the initial structural damage, we cannot intelligently determine whether specific remedial measures are necessary. Structural failure of some sort appears to have been an important contributor to this incident, but we do not know whether the age of the vessel was a factor or whether a double-hull vessel would have fared any better in the heavy November seas that doomed the *PRESTIGE*.

We believe it is essential that every effort be made to investigate and fully understand the circumstances of this accident. This includes a complete assessment of the historical record of the ship, its tragic last voyage and all the events surrounding the accident. We are therefore gratified to see that initial reports concerning the inrestigation underway have been, and hopefully will remain, open and impartial. We are however very concerned that vessel's Master is still being detained, being unable to meet an extremely unreasonable level of bail and that his circumstances are prejudicing the conduct of post-incident investigations. When a vessel is lost or is fighting for its life, imminent incarceration should be the last thing a master should have to worry about.

II. European Reaction

European organizations and governments have reacted swiftly, but without adequate information, to the *PRESTIGE* accident. Many of these reactions and subsequent initiatives generally lack supporting analysis, violate obligations under international conventions, and have the potential to create unnecessary economic hard-ships for many within Europe. More to the point of these hearings, many of the measures being considered in Europe have the potential of imposing adverse economic and safety impacts on other parts of the globe, including the United States. These impacts are not intentional, but rather reflect the reality of international transport of oil. When one nation or region arrogates to itself the right to impose standards that apply only in that region, other nations will be affected, often adversely. For this reason, it is essential that all significant marine safety measures be the product of international consensus. To gain that consensus, measures that address vessel design and operations must address documented issues and must be reasonable responses to those issues.

The European Commission issued proposed rules on December 20, 2002 in the form of a "Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC no 417/2002) on the accelerated phasing in of double hull requivalent design requirements for single hull oil tankers and repealing Council Regulation (EC) No 2978/94".

This proposal includes basically three amendments to existing regulations:

- 1. Mandating that heavy grades of oil can only be carried by double-hulled tank-
- 2. Shortening the phasing out schedule of single-hulled tankers; and
- 3. Broadening application of the special inspection regime for tankers, the socalled Condition Assessment Scheme, which is designed to assess the structural soundness of single-hulled tankers over the age of 15 years.

The Commission urged the European Parliament and the Council to adopt these measures as soon as possible so that they may enter into force by March 2003. The Commission also called upon European Union (EU) member States to ensure that

similar measures are adopted by the International Maritime Organization (IMO). Additionally, certain EU member states have taken unilateral measures in the aftermath of the *PRESTIGE* accident. For example, on December 13, 2002, a Royal Decree-law was published by the Spanish Government banning all single-hull tankers (regardless of registry) carrying heavy fuel oil, tar, asphaltic bitumen and heavy crude, from entering Spanish ports, terminals or anchorages. This decree entered into force on January 1, 2003. Spain and France also unilaterally prohibited all single-hull tankers carrying heavy fuel oils and heavy crude oil from transiting through their 200 nautical mile Exclusive Economic Zone (EEZ). Portugal has supported this position. This order was implemented almost immediately, resulting in Spanish and French warships intercepting tankers in their EEZ and preventing them from transiting and utilizing internationally recognized innocent passage and rights of freedom of navigation.

III. Concerns with Europe's Response

INTERTANKO is obviously very concerned with these initiatives and has undertaken to work with the EU, its member states and other organizations to develop appropriate responses to the *PRESTIGE* accident, particularly once all the parties have obtained adequate information about the cause of the casualty. However, several of the proposed measures potentially fly in the face of well-established international law and procedures. INTERTANKO must point out certain infirmities with the general thrust of the reactions of Spain, France, Portugal and the EU.

Single-hull tankers: There is at present no evidence that the loss of the PRES-TIGE was caused by its single hull construction or that a double-hulled tanker of similar dimensions would have survived where a single-hull tanker failed. It is misguided public policy to regard double hull construction as a panacea to all tanker casualties. Double hulls have been introduced to provide additional protection in low-energy groundings and collisions, neither of which were factors in the PRES-TIGE. Accelerated phase-out schedules for single-hull tankers operating in Europe

totally ignore the less than two year old work that developed a timetable for phasing out single-hulled tankers and that took into account demand for oil, the capacity of shipyards and ship recycling yards, and the need to avoid a tanker tonnage shortage.

Serious tanker owners with long-term commitments will find themselves in a most difficult situation if, for existing tonnage, new regulations make it impossible for them to fulfil their charter commitments. Some of these owners are of the quality that European authorities would have liked to serve the European trades on a regular basis. Sudden and ill-conceived changes can have dramatic market and safe-

ty implications.

Vessel Age: The focus on age limitations for ships, regardless of whether they are equipped with a single or double hull, also causes particular concern. A well built and maintained vessel can last a considerable period of time, with some tankers in the United States fleet lasting almost 50 years. There is a flawed logic in limiting the age of any ship because it discourages the initial investment in durable and robust ships and dissuades expensive maintenance of the asset in later life. A robust and sophisticated new built tanker would require at least 25 years of trade to justify the initial investment. A related concern is the prospect that an internationally agreed-upon program or vessel service life and maintenance may be arbitrarily abandoned. This program mandates increasing maintenance and inspection requirements for vessels based on age and service. By proposing elimination of vessels based on arbitrary age limits, regardless of maintained condition, potentially undermine maritime safety.

Economic Impacts: It is less than two years since a newly constructed timetable for phasing out single-hull tankers was introduced and agreed to at the EU and the IMO. This timetable took into account the demand for oil, the capacity of the shipyards and ship recycling yards, and the need to avoid a tonnage supply crisis. This may all be thrown out without proper consideration for tanker supply/demand situation. Attached (Appendix 1) is a graphical comparison of single-hull tanker tonnage to be phased-out under the current EU/IMO phase-out for single-hull tankers regulation, the EU new proposal and the OPA phase-out schedule.

Heavy Oil: Another problem is the confusion and potential chaos resulting from European proposals to restrict the carriage of "heavy oil" to or from European ports, offshore terminals or anchorage areas, to double-hull oil tankers. While the EU defines "heavy grades of oil" as heavy fuel oil, heavy crude oil, waste oils, bitumen and tar, application of this definition to real cargoes have widely different results.

Attached (Appendix 2) is an analysis conducted by INTERTANKO on the EU-proposed definition for "heavy crude oil" and a list of crude oils (Appendix 3) which could be banned from transportation by single-hull tankers. This proposal is being made without a clear understanding of its impact, the actual characteristics of the cargo and how the cargo reacts if released in the environment. There is also no analysis regarding the likely impact on the availability of appropriate tanker tonnage and probable supply implications.

Unilateral Action: INTERTANKO is opposed in principle to unilateral and regional legislation for international shipping. The free passage of vessels on the high seas of the world is fundamental principle of international law. It is in everyone's best interest to conduct discussions and impose regulations in the internationally

recognized forum for marine matters, namely the International Maritime Organization (IMO).

IV. Control and limitation of ships in Europe's EEZ: Innocent Passage

The EU has proposed to infringe on the long-held international principle of ships' innocent passage. This is a principle that the United States has fought to preserve and which the United States Navy continues to protect through "freedom of naviga-

tion" operations.

Following the loss of the PRESTIGE, it is understandable that EU member states wish to "analyze and address various ways to take measures to protect their coastal waters, including the territorial sea and exclusive economic zone"... where there is a threat ... "to the marine environment". EC Communication to the Parliament is a threat . . . "to the marine environment". EC Communication to the Parliament and Council of 6 December 2002. The actions of member states Spain and France however, it indicates that this review is meant to provide the basis for denying ships

however, it indicates that this review is meant to provide the basis for deriving emporeredom of passage in European EEZ waters.

The United Nations Convention on Law of the Seas (UNCLOS) Article 56 grants Coastal States jurisdiction in the EEZ "as provided for in the relevant provisions of this Convention with regard to, inter alia, the protection and preservation of the marine environment" (Articles 211 (5) and (6) and 220). Basically, 211(1) provides the through the IMO shall establish international rules to prevent that States acting through the IMO shall establish international rules to prevent, reduce and control pollution . . . and promote the adoption of routing systems designed to minimize the threat of accidents which might cause pollution. 211(5) and (6) allow Coastal States to adopt laws in respect of their EEZs "where the international rules and standards are inadequate to meet special circumstances and Coastal States have reasons for believing that a particular clearly defined area of their EEZ is an area where the adoption of special mandatory measures for the prevention of pollution from vessels is required . . . ". Such laws may not impose design, construction, manning or equipment standards on foreign vessels other than generally accepted international rules and standards. Consultation with and approval by IMO is required, and at least 15 months notice of entry into force.

Section 220(5) and (6) provide that where there is clear evidence that a vessel navigating in the EEZ or territorial sea has committed a violation of applicable international standards for the prevention of pollution resulting in a discharge causing or threatening significant pollution, the State can inspect or detain the vessel. Where there are clear grounds for believing a vessel has committed such a violation in the EEZ, the Coastal State can require information from the vessel to establish

whether it has in fact occurred (220(3)).

INTERTANKO recognizes the concerns of coastal nations over marine safety and environmental protection. These concerns must be addressed within the context of international law. In a joint press statement on December 12, 2002, the Round Table of international shipping organizations (INTERTANKO, the International Chamber or Shipping, the Baltic and International Maritime Council and INTERCARGO) condemned the continuing contravention of the Law of the Sea Convention by coastal states in the wake of the PRESTIGE incident. There is no jusvention by coastal states in the wake of the FRESTREE incluent. There is no justification for the illegal action taken by the Governments of Spain and France in ordering a number of foreign ships out of their 200 mile EEZ.

Merchant ships are entitled to freedom of navigation through the EEZ. The flouting of international obligations by two important maritime nations sets an inexcus-

able and damaging precedent which should be strongly opposed by other nations worldwide. Unilateral action by one or more Coastal States, or the entire EU, cannot be condoned, when clearly there are adequate provisions within international law to address these concerns. The United States Government should voice its posi-

tion on this very important international law issue.

V. Positive Indications

While we have focused upon the negative aspects of the European reactions to the *PRESTIGE*, there are nevertheless some aspects that we believe are positive:

- Long overdue attention that is now being given to Places of Refuge and the need for appropriate pre-planning of response arrangements. Acceleration of the designation of places of refuge is an essential activity not only in Europe but also around the world. Some independent commentators have suggested that much of the resulting oil pollution the *PRESTIGE* would have been avoided if the Spanish authorities had offered the vessel sheltered waters and assistance in cargo transfer in the early hours of the vessel's struggle with the sea;
- There is recognition that several European states have failed to live up to their obligations on Port State inspections, and the hope that, in addition to enforcement of those commitments, an enhanced inspection system will include better targeting rather than adherence to simple numerical targets;

- There must be renewed focus on compensation schemes, including a call for States to ratify both the Carriage of Hazardous and Noxious Substances and the Bunker Oil Pollution Damage Conventions, as well as support the introduction of the Supplementary Fund for Oil Pollution Compensation. The United States should give consideration to joining international conventions governing compensation for pollution;
- There has been confirmation that the ERIKA 1 package will be implemented promptly;
- The case for establishment of a European Maritime Safety Agency (EMSA). Such an agency could contribute to ensuring that EU states uniformly implement and enforce internationally agreed legislation and provide the European Commission with much-needed maritime competence, including a thorough analysis of post-accident inquiries, review of vessel maintenance and construction standards, training of inspectors, and designation of places of refuge; and
- Support for the development of a Flag State code of practice and the model audit scheme (the *PRESTIGE* was registered in the Bahamas, a flag with better safety record than many of the European flags), as well as procedures for the authorization and control of Classification Societies.

All of these developments are positive. INTERTANKO is totally committed to working with all responsible parties to ensure the safe transport of oil and to protect the marine environment. The Association therefore will remain strongly engaged in assisting the international maritime community, European officials and the European Maritime Safety Agency to achieve these goals.

VI. Conclusion

Marine casualties are traumatic events because of the human, environmental, and economic losses they often cause. This shock often leads to an impulse to respond politically before all relevant information is available. In terms of environmental protection, it is important to identify and understand problems before we try to solve them. It is obvious that some in the EU are determined to take unilateral action, in clear contradiction of previous statements in support of multinational international regulation of shipping. By contrast, some EU Member States do not agree with this approach and are advocating a more conscientious approach that does not risk diluting overall marine safety and environmental protection.

The effect of hasty European proposals can have impacts both in the EU as well as other countries, including the United States.

According to EÍA (U.S. Energy Information Administration), the 2001 total costs of U.S. oil imports were \$102,747,000,000. Out of this, only \$5,000,000,000 (or 5 percent) was the cost of transportation. A market with regional regulations means a less flexible and a tighter market. Such a situation will cause problems for oil companies and traders who wish to fix ships for optional discharge areas. Although, at this point in time, INTERTANKO cannot anticipate the level or significance of a possible increase of the transportation costs, one cannot exclude that the transportation costs to the U.S. could increase to \$2.5 per barrel instead of the approximate costs of \$1.5 per barrel for long haul crude been the average over the last years. INTERTANKO is not implying that the EU rules will induce immediate shortages

INTERTANKO is not implying that the EU rules will induce immediate shortages of tonnage. It is, however, of interest to note that U.S. imports a large amount of crude oils which, under the proposed EU definition, might be considered "heavy crude oils". These are all Venezuelan crudes, some from West Africa and some from the Arabian Golf. If the EU goes ahead with current proposals, all these oils would need to be transported in and out of the EU by double-hull tankers only. This could result in shortage of adequate tonnage supply either in U.S. or Europe or other parts of the world.

We are prepared to work with the United States Government to ensure its concerns are addressed both internationally and domestically. INTERTANKO believes very strongly that only through all parties working together can we truly achieve higher levels of marine safety and environmental protection.

Thank you again for the invitation to be here today and I would be happy to answer any questions you may have.

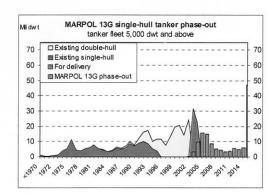
APPENDIX 1

Phase out schedules for single-hull tankers

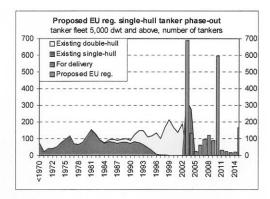
(Please note that the three graphs are preliminary estimates)

By Deadweight

13 G phase-out IMO MARPOL Annex I 13 G,

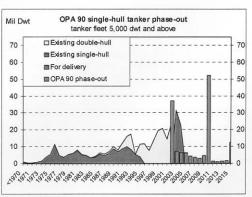


EU proposal The proposed EU amendment of (EC) No. 417/2002



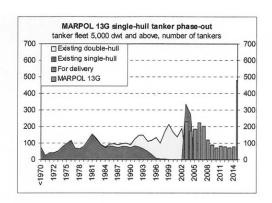
OPA '90 phase-out

Please note that OPA90 has exemptions for LOOP and dedicated lightering areas that allows SH until 2015



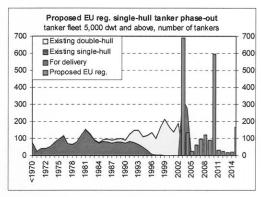
By number of tankers

13 G phase-out IMO MARPOL Annex I 13G



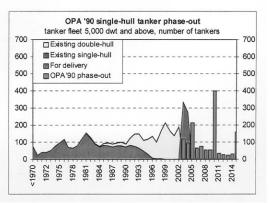
EU proposal

The proposed EU amendment of (EC) No. 417/2002
Please note that the three graphs are preliminary estimates



OPA '90 phase-out

Please note that OPA90 has exemptions for LOOP and dedicated lightering areas that allows SH until 2015 (quite a few tankers reached OPA '90 phase-out also in 2002)



APPENDIX 2

An interpretation of the meaning behind "Heavy Oil", T.J. Gunner— $$\operatorname{December}\ 2002$

Introduction

Currently various proposals are circulating within the EU to "ban the transport to or from ports of Member States of heavy grades of oil in single-hull oil tankers". The term "heavy grades of oil" is further defined within the proposal to mean and include "heavy fuel oil, heavy crude oil, waste oils, bitumen and tar". In real terms and for the layman this would mean all oils that are "dark and sticky" and impact

the environment. How can the terms "Dark and Sticky" be associated with a defined grouping of all the infinite number of differing oils that are carried by tankers today.

Given the association of the phrases with heavy fuel, tar, and bitumen and the use of the term "heavy" this would imply the use of the physical parameter of density as the guideline parameter. The parameter of "Density" reflects the "heaviness" of all substances where for example the density of lead is higher or heavier than that of water—in other words it sinks in water. However, is it the intention of the EU Commission, by use of this terminology, to identify those oils that create the greatest environmental impact and pollution threat? If this is so, then it is believed the greatest concern is the "persistence" of the oil as to its ability to break up and reduce its environmental impact from a pollution perspective. If this is so, then perhaps the parameter of Kinematic Viscosity at a defined temperature would be a potential guideline for the definition of the group of oils that need restriction to double-hulled tankers.

Alternatively, there is already an alternative definition, supplied by the International Oil Pollution Compensation Fund (IOPC), which allows the identification of those oils that are non-persistent. This definition uses the parameter of the percentage of the substance that can distil at certain defined temperatures. ¹ The problem is that the distillation data for each type or individual cargo is never available and therefore no valued judgement can be made regarding the shipment criterion for that specific cargo for the type of vessel to be used for its transportation.

What is needed is a clear outline for the cargo type using a regularly available physical parameter so that a clear evaluation can be undertaken regarding a cargo's shipment. Such parameters would be either Density and/or Kinematic Viscosity.

Density

Given the foregoing discussion and the association with the terms "heavy" and "fuel oil", the standard max density of heavy fuel oil is 991 kg/m3 at 15 °C (ISO 8217) but is more usually about 985–989 kg/m3 at 15 °C. Using this criteria then there are very few crude oils that are regularly traded by sea in large volumes that have equivalent densities to that of a residual fuel oil given that fuel oils are derived as a heavy residue from the crude oil refining process. However, by lowering the density figure and using an arbitrary density figure of say 900 kg/m3, as a definition for "heavy crude oil", then this same density would capture all persistent fuel oils, tars and bitumens carried by tankers today. The density criteria would also include such crude oils as examples:

Alba (North Sea), Bachaquero (all grades), Champion, Gryphon, Balder, Laguna, Leona, Duri, Bonny Med., Lokele, Maya, Merey, Captain (North Sea).

The foregoing list is but an example of crudes carried by sea in any volume.

Viscosity

Turning to the viscosity criteria then it will be recalled that crude oils fall into three defined but broad categories; namely Paraffinic, Intermediate and Aromatic types. Paraffinic and Intermediate crude oils have a Kinematic Viscosity similar to that of water at 50 °Centigrade. Therefore, it will be the Aromatic type crude oils that would be primarily considered for impact of this parameter. Using the same principles as above by comparing viscosities with those of fuel oils then with a heavier fuel oil viscosity being 380 centistokes at 50 °C (ISO 8217) the majority of these type of crude oils would come from Venezuela and the northern areas of South America e.g. Boscan, Tia Juana Pesado etc.

Proposed Definition

Given the foregoing discussion, the following possible definition may be a balanced and suitable definition to meet the objectives of the proposals for a "Heavy Crude Oil":

 $^{^1}The$ IOPC Fund definition of a non persistent oil is "An oil is considered non persistent if at the time of shipment at least 50 percent of the hydrocarbon fractions, by volume, distil at a temperature of 340 °C (645 °F), and at least 95 percent of the hydrocarbon fractions, by volume, distil at a temperature of 370 °C (700 °F), when tested in accordance with the ISO 3405:2000 test method or any subsequent revision thereof."

A Heavy Crude Oil is a crude oil, as defined by Regulation 1.28 of MARPOL 73/78, but having a Density greater than 900 kg/m3 AND a Kinematic Viscosity greater than 250 cst 2 at 30 °Centigrade. 3

Heavy Fuel Oil

Turning now to the question concerning "Heavy Fuel Oil"—reference to this type of material for ships may be found in the ISO 8217 specification and table 2 thereof. However, this definition as quoted above will also cover all the intended types of fuels and substances as defined within the original scope of oils—i.e. "Heavy Grades of Oils" to be banned from carriage on single-hulled tankers.

²This viscosity criterion has its basis within the associated guidelines to the International MARPOL Regulations for pumpability of cargoes—i.e. those cargoes whose viscosity is so high that they require heating for transportation.

³N.B. proposals for alternative definitions include the parameter of API Gravity at 60 °F. This is an alternative oil industry parameter for the SI parameter of Density (normally recorded at 15 °C). Proposals for either API Gravity 20 or 30 have been voiced but the foregoing definition weighs the total impact of these values. The proposed density of 900 kg/m3 is equivalent to an API Gravity of approximately 25.6. For reference purposes the following web site can provide an indicative API Gravity for a diverse selection of crude oils: http://www.oil-transport.info/Crude Oil Data/crude oil data.html

APPENDIX 3

Crude Oils with an API less than 30

(suggested as "heavy fuel oils" by the EU Commission proposed definition and which could be banned from transportation on single-hull tankers)

, ,	tankers)	
Name of Crude	API Gravity at 60 °F	Indicative 2001 Shipped Vol [Bbls]*
Abu Safah	28.90	15,047,441
Alaskan North Slope	27.20	138,960,523
Alba (North Sea)	19.00	23,536,950
Al Rayyan	24.50	
Al Shaheen	29.00	
Arabian Heavy	27.80	91,160,684
Arabian Medium	29.50	112,857,221
Ardeshir	26.20	
Ashtart	29.00	
Bachaquero BCF13	13.00	
BCF 17	17.00	
BCF 22	22.00	
BCF 24	24.00	
Bachaquero Dos	13.80	
Nowruz	26.80	
Balder (N.Sea)	23.40	
Basrah Heavy	23.70	
Basrah Medium	29.60	
Belayim Blend	27.30	13,402,771
Belayim Land	22.30	
Belayim Marine	29.50	
Bima	20.50	
Bintulu	29.40	
Bolivar Coast 24	24.00	
Bonny Medium	26.60	
Bouri	26.00	21,444,608
Bow River	24.90	
Buzachinakaya	25.00	
Caldarosa	29.20	
Canadon Seco	26.60	
Cano Limon	29.00	
Captain (N.Sea)	19.30	
Carassai Gasolina	26.30	
Caripito	21.60	
Carmopolis	25.10	
Cavone	24.10	
Ceuta	29.70	
Champion	23.40	
Chinaja	29.20	
Cinta	28.00	
Clair 1	28.00	
Coban	25.80	6,463,302
Cold Lake Vancouver	23.00	
Dai Hung	29.10	
Dirillo	15.40	
Djeno	28.00	
Duri	21.80	11,437,739
Dutch Offshore	29.50	
E4	19.80	
Emerald	23.10	
Emeraude	23.00	
Emilio 5	9.30	
Emilio 7	8.60	
Escalante	23.50	
Fao Blend	29.70	
Foinhaven	25.00	
Forcados Blend	28.40	77,526,071
Forth Central	19.00	
Fosterton	23.80	1

58 Crude Oils with an API less than 30—Continued

(suggested as "heavy fuel oils" by the EU Commission proposed definition and which could be banned from transportation on single-hull tankers)

Name of Crude	API Gravity at 60 °F	Indicative 2001 Shipped Vol [Bbls]*	
Furial	29.00		
Geisum	18.50		
Gela	14.60		
Gianna 2	7.10		
Giaurone	12.90		
Gombe Marine	23.00		
Gyrphon	21.30		
Gulf of Suez	29.90		
Gullfaks	28.60	106,047,000	
Harding Blend	20.60	, ,	
Heidrun	28.60	21,496,332	
Helm Blend	27.30	, ,	
Iranian Heavy	29.70	96,648,389	
Isla	11.30		
Khafji	27.90		
Kiame	29.30		
La Rosa Medium	24.50		
Lagotreco Mediano	24.50		
Laguna	11.20		
Leona	22.70		
Libyan B1NC41	28.10		
Liu Hua	22.80		
Lloydminster	22.50		
Loango	26.10		
Lokele			
Lokeie Mandji	20.00 28.50		
Maralago	20.90		
Maraiago Mars	20.90		
		979 990 490	
Maya	21.90	272,329,420	
Menemota	18.90	11,780,256	
Merey	16.60	20,179,943	
Mesa 28	27.30	00 100 104	
Mesa 30	29.50	33,108,164	
Miri Light	29.00		
Mokoko Abana	19.20		
Morichal	12.00		
Narciso	21.00		
Odudu	27.00		
Ombrina	21.50	15.100.055	
Oriente	28.10	17,138,675	
Payamino	25.50		
Perla	14.10		
Pilon	13.80		
Pisticci	9.40		
Prezioso	19.00		
Prinos Blend	27.90		
Prinos North	18.70		
Ragusano	19.56		
Ras Budran	24.70		
Ras Gharib	25.40		
Ratawi	24.30		
Reb 28	28.10		
Rospo Mare	11.88		
San Joaquin Valley	15.10		
Santa Maria	17.40		
Sarago	11.40		
Sarago 1	8.10		
Schiehallion (N. Sea)	25.40		
Sedgewick	21.40		
Seme	22.70		
Sendji		1	

Crude Oils with an API less than 30-Continued

(suggested as "heavy fuel oils" by the EU Commission proposed definition and which could be banned from transportation on single-hull

Souedie 24.00 29,659,237 Stag 18.50 S Sumatran Heavy 21.70 Tarakan 26.30 Tempa Rossa 2 18.70 Ta Tia Juana 102 25.80 Tia Juana 24 24.00 Tia Juana Light 29.40 Tia Juana Pesado 11.00 Tona 29.40 Trintopec 26.90 Trintopec 26.90 36,740,966 Trurkish Indigenous 25.80 Urals Heavy 28.00 VS 28 28.00 VS 28 <t< th=""><th>Name of Crude</th><th>API Gravity at 60 °F</th><th>Indicative 2001 Shipped Vol [Bbls]*</th></t<>	Name of Crude	API Gravity at 60 °F	Indicative 2001 Shipped Vol [Bbls]*
Stag	Shengli	24.50	
Sumatran Heavy 21.70 Tarakan 26.30 Tempa Rossa 2 18.70 Tia Juana 102 25.80 Tia Juana 24 24.00 Tia Juana Light 29.40 Tia Juana Pesado 11.00 Tona 29.40 Printopec 26.90 Troll (N. Sea) 28.70 36,740,966 Purkish Indigenous 25.80 36,740,966 Urals Heavy 28.00 28.00 VS 28 28.00 28.00 Vega 18.30 30 Vic Bihl 21.10 36,740,966 Wafra Burgan 23.10 36,740,966 Wafra Ratawi 24.80 36,740,966 Vic Bihl 21.10 36,740,966 Vic Bihl 24.80 36,740,966 Vic Bihl 21.10 36,740,966<	Souedie	24.00	29,659,237
Tarakan 26.30 Tempa Rossa 2 18.70 Tia Juana 102 25.80 Tia Juana 24 24.00 Tia Juana Light 29.40 Tia Juana Pesado 11.00 Tona 29.40 Trintopec 26.90 Troll (N. Sea) 28.70 36,740,966 Turkish Indigenous 25.80 Urals Heavy 28.00 VS 28 Vega 18.30 Vic Bihl 21.10 Wafra Burgan 23.10 Wafra Ratawi 24.80 Wandoo 19.40 Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zaafaron 29.60	Stag	18.50	
Tempa Rossa 2 18.70 Tia Juana 102 25.80 Tia Juana 24 24.00 Tia Juana Light 29.40 Tia Juana Pesado 11.00 Tona 29.40 Trintopec 26.90 Proll (N. Sea) 28.70 36,740,966 Turkish Indigenous 25.80 Urals Heavy 28.00 VS 28 28.00 Vega 18.30 Vic Bihl 21.10 Wafra Burgan 23.10 Wafra Ratawi 24.80 Wandoo 19.40 Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Sumatran Heavy	21.70	
Tia Ĵuana 102 25.80 Tia Juana 24 24.00 Tia Juana Light 29.40 Tia Juana Pesado 11.00 Tona 29.40 Trintopec 26.90 Trulkish Indigenous 25.80 Urals Heavy 28.00 VS 28 28.00 Vega 18.30 Vic Bihl 21.10 Wafra Burgan 23.10 Wafra Ratawi 24.80 Wandoo 19.40 Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Tarakan	26.30	
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Tona 29.40	Tia Juana Light	29.40	
Trintopec 26.90 Troll (N. Sea) 28.70 36,740,966 Purkish Indigenous 25.80 Urals Heavy 28.00 VS 28 28.00 Vega 18.30 Vic Bihl 21.10 Wafra Burgan 23.10 Wafra Ratawi 24.80 Wandoo 19.40 Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Tia Juana Pesado	11.00	
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Turkish Indigenous 25.80 Urals Heavy 28.00 VS 28 28.00 Vega 18.30 Vic Bihl 21.10 Wafra Burgan 23.10 Wafra Ratawi 24.80 Wandoo 19.40 Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Trintopec	26.90	
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VS 28 28.00 Vega 18.30 Vic Bihl 21.10 Wafra Burgan 23.10 Wafra Ratawi 24.80 Wandoo 19.40 Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Turkish Indigenous	25.80	
Vega	Urals Heavy	28.00	
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Yanga 29.20 Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Wafra Ratawi	24.80	
Yizheng 28.50 Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Wandoo	19.40	
Yombo 17.50 Zaafarana 23.10 Zafiro 29.60	Yanga	29.20	
Zaafarana 23.10 Zafiro 29.60	Yizheng	28.50	
Zafiro 29.60	Yombo	17.50	
	Zaafarana	23.10	
Zatchi 23.70	Zafiro	29.60	
	Zatchi	23.70	

^{*} This is only an indication of the extent of carriage of the individual crude oil by sea where data is available. These figures should not be taken as absolute but seen in relationship to one another.

The CHAIRMAN. Mr. Godfrey, can you move over just a little bit. I want to apologize to the witnesses that there is not sufficient room at the table, and I apologize for that again.

Mr. Frick, welcome.

STATEMENT OF G. WILLIAM FRICK, VICE PRESIDENT FOR INDUSTRY OPERATIONS AND GENERAL COUNSEL, AMERICAN PETROLEUM INSTITUTE

Mr. Frick. Thank you, Mr. Chairman, Members of the Committee. I am Bill Frick, Vice President for Industry Operations and General Counsel of the American Petroleum Institute, a trade association representing over 400 companies involved in all aspects of the petroleum industry. I am pleased to be here today on behalf of the API members, member companies who own, operate, and charter tanker fleets for the transportation of crude oil and petroleum products.

With the chair's permission, I will proceed with a brief oral statement, and submit a more detailed version for the record.

The CHAIRMAN. Your complete statement will be made part of the record, Mr. Frick. Thank you.

Mr. FRICK. The Committee is to be commended for calling this hearing to consider issues arising from the breakup of the MV PRESTIGE and the subsequent damage caused the coastlines of

France and Spain. It is distressing to all of us to see the impacts this incident has caused and continues to cause to such a beautiful and bountiful area of our world.

As Members of this Committee know, concern over the effects of major tanker accidents was the impetus for enactment of OPA-90. This act deserves a large measure of credit for the dramatic improvement in spill prevention over the last decade. In the average year from 1981 to 1990, according to U.S. Coast Guard records, a total of 70,000 barrels of oil were released by tankers in U.S. waters. But the rate dropped to just 4,000 barrels per year in the 10 years following enactment of OPA-90, a decrease of 95 percent. A chart of this dramatic improvement is attached to our written testimony.

Given that over 25 billion barrels were imported over this period, it is an extraordinary success story. Nevertheless, even with great progress, the industry continuously seeks to improve its records,

guided by the OPA-90 framework.

OPA-90 is an important bulwark against a catastrophe such as the one caused by the PRESTIGE. It has many beneficial features, from establishing financial accountability and liability to limiting the hours a seaman can work. The most discussed feature of the act, however, is the directive for an orderly phase-out of single-hull tank vessels in favor of double-hull or hull-within-a-hull designs.

Some have questioned whether the American tanker industry still favors the conversion that will make single-hull tankers a thing of the past in U.S. waters by the year 2015. To be very clear, API and its member companies support the double-hull conversion schedule in OPA-90. API members who own ships are investing large sums in new double-hull tankers and are on schedule to meet

OPA's phase-out.

We do not, however, want the expected benefits of double hulls to diminish the importance of other components in our having safe marine transportation of oil. Effective prevention relies on a system of measures that goes beyond hull configuration, including regulatory and industry oversight, a vessel's maintenance as well as the competency of its crew, and port infrastructure. Each of these plays a vital role in the system's success. Double hulls provide protection from low-energy collision and grounding. They are not a substitute for proper standards of management, operation, maintenance, and corrosion control.

In the wake of the PRESTIGE incident, European governments have under consideration unilateral acceleration of the single-hull phase-out schedule along with certain other restrictions on tankers that may enter EU ports. This has raised issues of whether the EU requirements could affect shipments to the United States. Certainly, to the extent that phase-out schedules differ from one part of the world to another and companies must redeploy tankers, the world shipping system will not run as smoothly and efficiently as it can.

It appears, however, that there is sufficient capacity and flexibility in the worldwide shipping industry to adjust, if the EU does adopt these new requirements, without significant disruption to U.S. commerce. Were such measures to spread to other regions, however, the situation could change. Because shipping is a global

activity, API believes that the development of programs and standards relative to these issues should generally be directed toward the entire world fleet, via an international body such as the International Marine Organization, IMO. They should not be implemented just on a unilateral port-state-by-port-state basis, which is why the United States pursued worldwide phase-out of single hulls through IMO after passage of OPA-90.

As an industry, we are very pleased with the strong record of improvement in preventing tanker spills. We remain committed to full implementation of OPA-90 and believe that it has all parties on the right track. More stringent measures such as the EU is considering are not in our view warranted, given the progress made

here pursuant to OPA-90.

We look forward to continuing our work with the Coast Guard, the other agencies, and the Congress to realize the statute's goals. Mr. Chairman, I will be happy to respond to questions.

The prepared statement of Mr. Frick follows:

PREPARED STATEMENT OF G. WILLIAM FRICK, VICE PRESIDENT FOR INDUSTRY OPERATIONS AND GENERAL COUNSEL, AMERICAN PETROLEUM INSTITUTE

The American Petroleum Institute (API) is a national trade association representing over 400 companies involved in all aspects of the petroleum industry. A significant number of API member companies own, operate, and charter substantial tanker fleets. On their behalf, API would like to take this opportunity to respond to your questions and concerns regarding the recent MV PRESTIGE oil spill incident off the coast of Spain. We would like to address the protections offered to this country by the passage of the Oil Pollution Act of 1990 (OPA) and to emphasize additional measures that API and its member companies have taken to improve the integrity and safety of the marine transportation system in the United States

API has testified before Congress on a number of issues relating to OPA. We specifically addressed the topic of OPA's double-hull requirements for tank vessels, during a hearing of the U.S. House or Representatives' Committee on Transportation and Infrastructure Subcommittee on Coast Guard and Marine Transportation on June 29, 1999. API has aggressively supported the highest technical and safety standards for tank vessels and, on behalf of its Marine Transportation Segment members, have taken very seriously our role in safely and efficiently transporting the oil needed to meet America's energy needs. We remain committed to the tanker requirements of OPA, which mandate when a vessel must either be retrofitted with

a double-hull or retired from U.S. service.

As a direct result of the *MV PRESTIGE* incident, the European Commission proposes an immediate prohibition of single-hull vessels of 600 tons deadweight and above from the transportation of heavy fuel oil, heavy crude oil, waste oils, bitumen and tar into the ports of the 15 European Union (EU) member States and also proposes an accelerated phase-out of all single-hull vessels for the transport of all types of oil. Since December 12, 2002, the Spanish and French governments have taken a further step in banning singlehull tankers, built more than 15 years ago, from sailing within 200 miles of their coastlines unless such vessels submit to extensive inspections by the port states.

The double-hull provisions of OPA have significantly changed the oil transportation industry, both domestically and abroad. The international community followed the U.S. lead by adopting similar requirements through amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL). Since 1993, international law has required that all large, newly constructed tankers be built with double-hulls. According to INTERTANKO 1, well over 50 percent of the

world's fleet carries double-hulls as we enter 2003.

Vessels that are directly owned or chartered by the major oil companies or their affiliate organizations transport a significant volume of crude oil and petroleum products to the U.S. As part of their respective safety management system, organizations employ or subscribe to a vessel screening and inspection process (vetting) when selecting third party vessels to transport cargo. Typically, the vetting and

¹ International Association of Independent Tanker Owners.

screening process includes a review of a third party's management system and compares the nominated vessel to marine safety criteria which is based on recognized safety standards established by regulatory authorities and reputable maritime organizations. Oil company tanker fleets must meet the same high standards as these chartered vessels.

Members of the U.S. maritime industry have and will continue to take delivery of new Jones Act double-hull tankers (U.S. owned, built, flagged, and crewed with U.S. documented seafarers) to maintain compliance with the provisions of OPA and to keep pace with tonnage requirements. However, the number of Jones Act tankers will remain a relatively small portion of the total tanker fleet that delivers crude oil and petroleum products to the U.S. Today, the U.S. consumes almost 20 million barrels of oil daily. We import 55 percent of the crude oil and petroleum products we consume. Of this total, 10 million barrels per day are transported to the U.S. by non U.S.-flag tankers.

In early November 2002 API responded to a letter of inquiry from six U.S. Senators, relating to the 25-year phase-out schedule of OPA and concerns over the number of shipbuilding orders to serve coastwise or Jones Act oil transportation trade in the near future. As much of the discussion on the petroleum industry's conversion to double-hulls has focused on the U.S. tanker fleet, we offer the following observations about the two primary and distinctly different trades that affect U.S. flag ton-nage—Alaska North Slope (ANS) crude and the U.S. coastwise petroleum product

market.

Alaska North Slope Crude Trade

The number of tankers needed to transport Alaskan North Slope (ANS) crude to West Coast refineries is declining. Still, several double-hull tankers have been introduced to this trade and several others are being built in accordance with OPA's phase-out schedule. More specifically, a fleet of 25 Jones Act tankers is currently engaged in the transport of ANS crude oil. Nine of these tankers have double-hulls. Seven (or 11 if all options to build are exercised) additional double-hull tankers will be added to the fleet when the new Polar Tankers² and Alaska Tanker Company³ crude tankers ordered and under construction are delivered by 2008. In addition,

crude tankers ordered and under construction are delivered by 2008. In addition, SeaRiver Maritime, Inc. 4 is currently evaluating its needs.

As you know, production of ANS crude oil has declined from 1.8 million barrels per day in 1990 to 1.0 million barrels per day in 2002. The Alaska Department of Natural Resources forecasts that ANS production will steadily decline to about 577,000 barrels per day by 2016, resulting in a corresponding reduction in needed tanker capacity. Based on the production from existing fields, average utilization of tankers and recent shipping patterns, API's analysis found that the capacity of the existing and planned fleet should be sufficient to meet the projected ANS production (see Figure 1) as single-hull vessels are phased out under the mandated OPA timetable. table.

U.S. Coastwise Petroleum Product Trade

Again, while faced with decreasing demand for petroleum product tankers, industry has invested significant resources to construct new double-hull product tankers. According to the U.S. Maritime Administration's (MARAD's) most recent statistics, there are currently 64 available tankers to operate and move products along the U.S. coast. Twenty-two are double-hulled. However, U.S.-flag tankers continue to move a diminishing amount of product, particularly between the Gulf Coast and East Coast. Since the 1980s, there has been an ever-increasing use of domestic pipelines, movement of product imports on foreign flag tank vessels, and an increased deployment of double-hull coastal tank barges. (Coastal tank barges have become more attractive as the cost for new product tanker construction continues to escalate.) These trends are expected to continue, primarily because of the disparate cost of new U.S. product tanker construction (approximately triple the cost of a similar foreign built vessel). 5

Currently there is excess capacity in the U.S.-flag product tanker market. In 2000 (the latest data available from MARAD), of the 64 U.S.-flag product tankers, only 53 were engaged in domestic operations. Ten could not find cargo to haul in the domestic market and were deployed by their owners to the international market (where they were at a distinct competitive disadvantage); another was idle. More-

² Polar Tankers is owned by ConocoPhillips.

³ Alaska Tanker Company is a newly formed "pool" operator formed between BP, Keystone Shipping, and OSG.

⁴SeaRiver Maritime, Inc. is a wholly owned affiliate of Exxon Mobil Corporation.

⁵The cost of a foreign built product tanker is approximately \$30 million and a U.S. built is approximately \$90 million.

over, the U.S. coastal tank barge fleet, which continues to become a competitive alternative to product tankers is also under-utilized.

ternative to product tankers, is also under-utilized.

Congress, when it enacted OPA, recognized that the transition from a single-hull to a double-hull fleet needed to occur in an orderly fashion and without a condemnation of the substantial investment already made in the existing tanker fleet. Congress provided a 25-year period to retire single-hull vessels. Thanks to the foresight of the drafters of OPA, the energy supply chain has not been disrupted as a result of this legislation. This was a risk-based decision that balanced economic and supply chain considerations with the oil spill risk reduction potential of double-hulls. It is worth noting the wisdom of this decision. The transition has been and we expect it to continue to be orderly.

The value of double-hull tanker designs has been evaluated and supported by the National Research Council (NRC). Their 1991 report, *Tanker Spills—Prevention by Design*, concluded that the double-hull design is among the best values on the basis of cost-effectiveness. The findings of this report are consistent with the operational experiences of double-hull tankers and the overall improved environmental performance record of the tank vessel industry.

However, we believe that safe marine transportation, as a system, goes beyond hull configuration and that each component of this system (including regulatory oversight, the vessel's maintenance as well as the competency of its crew, and port infrastructure) plays a vital role in the system's success. Double-hulls provide protection from low energy collision and grounding. They are not a substitute for proper standards of management, operation, maintenance, and corrosion control.

The question of whether the MV PRESTIGE incident could have been prevented

The question of whether the MV PRESTIGE incident could have been prevented by a double-hull requirement presupposes we know why the PRESTIGE incident occurred. That question has not yet been fully answered. Although several possibilities are under investigation, none lead to the conclusion that a double-hull design would have prevented the incident. The PRESTIGE was in trouble days before her catastrophic failure and had requested help and refuge from Spanish authorities. It was declined entry to a port of refuge and sent back out to sea in deteriorating weather.

It is important to keep in mind that while the double-hull design is good, hull design alone will not prevent all oil spills. More important than hull design are good management, proper maintenance, and correct navigational decisions. Detailed attention, by Classification Societies to vessel structure and then to Special Survey repairs, together with comprehensive Port State Control inspections and the use of industry and other databases (such as the OCIMF SIRE system and Equasis), will greatly reduce the risk of such environmental incidents. ⁶

Beyond OPA—An Improved Industry Record

To date, 75 percent of the world tanker fleet is independently owned. To ensure that vessels and their crews are of the highest quality, tankers are subjected to a series of rigorous inspections by government, vessel classification societies, and the industry. For example, all tankers operating in the U.S. are evaluated for inspection by the U.S. Coast Guard. Since July 1998, vessels are required to have a certified International Safety Management (ISM) system in place. Our companies conduct pre-hiring inspections of independent tankers using trained inspectors located throughout the world. These inspections go beyond governmental requirements and often extend to the tanker's management structure.

As a result of numerous international and U.S. requirements and industry practices, the tankers calling on U.S. ports, both domestic and foreign-flagged, are the best-maintained commercial ships in the world. For example, less than 1 percent of tankers inspected by the Coast Guard are detained, which is the lowest percentage of any vessel type. Furthermore, Coast Guard data shows the dramatic reduction in oil spills from tankers since the enactment of OPA. For the period 1981 to 1990, tankers released an average of 70 thousand barrels per year. However, for the period 1991–2000, releases from oil tankers averaged 4 thousand barrels per year—a decrease of 95 percent!

Tankers deliver the oil and petroleum products we depend on, and the nation depends on tanker operators to do their job safely. It is a responsibility that each of our members considers paramount to their success (see Figure 2). Our members will continue to ensure they secure adequate capacity to meet their own transportation requirements and the energy needs of this country.

⁶The Oil Companies International Marine Forum's (OCIMF's) SIRE system and Equasis—the European Commission's/French Maritime Administration's cooperative information system, which collates existing safety-related information on ships from both public and private sources and makes it available on the Internet—are examples of such databases.

Actions of the European Union (EU) and Impacts on U.S. Trade

It is difficult to determine at this time the exact economic impacts that the EU actions (banning heavy oil shipments in single-hull tankers and accelerating the phase-out of single-hull tankers) might have on U.S. trade. Demand for new, well-maintained, double-hulled tankers to haul heavy oil will likely increase, placing upward pressure on chartering rates for these vessels. Finally, the impact of the more general accelerated phase-out schedule is difficult to assess. However, to the extent that phase-out schedules differ from one part of the world to another, the tanker market may become segmented and operate less efficiently.

In the long-term however, we have concerns over the port of refuge issue emanating from the *MV PRESTIGE* incident. This important topic has the potential to impact trading decisions by U.S. companies. API strongly believes that the development of programs and standards relative to this issue should be directed toward the entire world fleet, via an international body such as the International Maritime Organization (IMO), and not attempted on a unilateral port state by port state basis.

Conclusion

Over the past 12 years, the oil and tanker industries have demonstrated that they can safely supply America with petroleum under the provisions of OPA. This oil fuels our transportation systems, heats our homes, powers our industry, and contributes substantially to America's high standard of living. The industry is converting its tanker fleet to double-hulls in compliance with OPA and MARPOL. By 2015 the tanker fleet that calls on U.S. ports will be double-hulled. API supports the double-hull conversion schedule in OPA, and no additional action by Congress is necessary to ensure that this conversion will take place.

API and its members are dedicated to ensuring that the oil we all use to go about our daily lives is delivered safely. Since 1990, there have been no major environmental incidents involving tankers in U.S. coastal waters and a substantial reduction in smaller incidents has also occurred. This can be credited to improved industry operations, technological advancements, enhanced risk management tools, international enforcement of tanker regulations (for foreign tankers calling on U.S. ports), and modernization of the tanker fleet, including the double-hull requirements.

We continue to support the excellent environmental and safety improvements made to date through OPA and industry initiatives. We continue to strive for 100 percent safe delivery of petroleum and petroleum products.

Thank you for the opportunity to share these important views with the Members of the Senate Commerce, Science, and Transportation Committee.

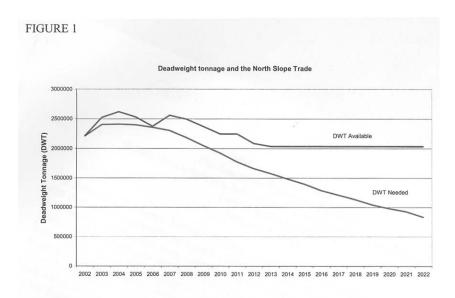
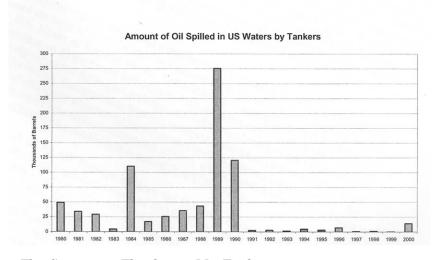


FIGURE 2



The CHAIRMAN. Thank you, Mr. Frick. Mr. Cowen, welcome.

STATEMENT OF ROBERT N. COWEN, SENIOR VICE PRESIDENT AND CHIEF OPERATING OFFICER, OVERSEAS SHIPHOLDING GROUP, INC.

Mr. COWEN. Thank you, Mr. Chairman. My name is Robert N. Cowen. I am Senior Vice President and Chief Operating Officer of Overseas Shipholding Group. OSG, based in New York and listed on the New York Stock Exchange, is the largest U.S. independent owner and operator of oil tankers. Over the past 3 years, OSG has

invested over \$800 million in the renewal of our fleet with modern double-hull vessels.

With your permission, Mr. Chairman, I would like to submit my full remarks.

The CHAIRMAN. Without objection.

Mr. COWEN. Thank you.

When Congress enacted the Oil Pollution Act of 1990, the U.S. took a bold leap forward, leading the world in requiring double hulls and imposing new safety requirements for tankers moving oil to our shores. The International Maritime Organization followed our lead to require double hulls. But recent spills involving older single-hull vessels off the coast of Europe highlight the continuing dangers associated with older single-hull vessels and create a very real risk that new stricter practices and rules imposed in other parts of the world will force such vessels to trade to the U.S.

The point I want to stress to the Committee today, Mr. Chairman, is that in the highly competitive world of international shipping, restrictions that bar older tonnage from particular trades will necessarily drive substandard tonnage to trades where regulations and practices are more lax and permissive. The U.S. cannot allow our waters to become a haven for older single-hull vessels that are no longer permitted to trade to the EU, or to other major trading nations like Japan and Korea. We must act to restrict these vessels from trading to the U.S. or face an unacceptable risk of our own

PRESTIGE or ERIKA.

I would like to share with this Committee some very disturbing statistics. Shockingly, a disproportionately large number of the world's remaining 25-year-old single-hull VLCCs are trading to the U.S. Gulf every day. While the world fleet continues to add modern double-hull vessels, the remaining older vessels are still coming to the U.S. in large numbers. In 2002, 56 single-hull VLCCs of 25 years of age or older were fixed on voyages to the U.S. Gulf Coast. This represents over 40 percent of all spot liftings worldwide on vessels of this vintage. Only one vessel of over 25 years of age was fixed to the EU in all of 2002. Not a single vessel of this vintage discharged in Japan or in Korea.

Similarly, 50 percent of all spot liftings on VLCCs, very large crude carriers, of between 21 and 25 years of age, some 171 liftings, discharged in the U.S. Gulf. Not a single vessel of this age vintage discharged in the EU or in Japan or in Korea throughout 2002. Just looking at the first week of this year alone, all seven spot fixtures of VLCCs in excess of 20 years of age were reported

moving oil from the Middle East to the U.S. Gulf.

For many years, it has been known in the tanker business that older single-hull vessels are not welcome in Japan or Korea. Since the ERIKA incident in 1999, it is also the fact that such vessels are effectively discouraged from calling to the EU as well. With the recent oil pollution disaster involving the 26-year-old single-hull tanker PRESTIGE off the coast of Spain, the EU and in particular, Spain, France, and Portugal have moved rapidly and forcefully to tighten the restrictions on old single-hull tonnage trading to their ports and moving along their coastlines.

The European Commission has recently adopted an outright ban on any single-hull vessel carrying fuel oil or heavy crude from entering EU ports. France, Spain and Portugal have already acted to exclude single-hull vessels carrying fuel oil and heavy crude from

passing within their 200-mile economic exclusion zones.

Once the current EU proposals to ban single-hull vessels from their ports and coastal waters are put into effect, these vessels will be forced to seek employment in trades that still accept them. When single-hull vessels are banned from trading to the EU, where will these vessels trade? We cannot allow our rules here to be more permissive, or these vessels will surely trade here.

This is most eloquently illustrated by an article that appeared in Lloyd's List, which is the shipping newspaper, on January 8, 2003, a copy of which is appended to my testimony. As stated in that article, a single-hull tanker carrying crude oil, which had been scheduled to discharge in Spain, was diverted to the U.S. because of the

present sensitivity in Spain to calls by single-hull tankers.

As an aside, I would like to point out to the Committee that if increasing numbers of older single-hull vessels call at U.S. ports, we believe the Coast Guard will be faced with an enormous additional burden to inspect all these vessels. In this case, consideration would have to be given, we would suggest respectfully, to providing the Coast Guard with the necessary additional resources to

carry out such a task.

We submit that it is wholly unacceptable to allow the U.S. to become the world's port of last resort. As a matter of law and public policy, the Congress declared in 1990 that the U.S. would ban older substandard tonnage from its shores. Congress concluded that these vessels represent an unacceptable risk to our environment. Unfortunately, recent incidents in Europe confirm that such vessels continue to trade, and do in fact pose a grave risk to our oceans and coastlines. The U.S. cannot stand by and permit others to adopt trading rules which are more stringent than ours and that drive such vessels to our shores. We must maintain our vigilance, and ensure that our rules restrict such vessels from trading to the U.S.

Thank you, Mr. Chairman. I will be pleased to answer any questions.

[The prepared statement of Mr. Cowen follows:]

PREPARED STATEMENT OF ROBERT N. COWEN, SENIOR VICE PRESIDENT AND CHIEF OPERATING OFFICER, OVERSEAS SHIPHOLDING GROUP, INC.

My name is Robert N. Cowen. I am Senior Vice President and Chief Operating Officer of Overseas Shipholding Group, Inc. OSG, based in New York and listed on the New York Stock Exchange, is the largest U.S. independent owner and operator of oil tankers. OSG's modern fleet of 50 vessels includes 15 double-hull Very Large Crude Carriers or VLCCs which typically carry 2 million barrel loads from the Middle East and West Africa and 13 double-hull Aframax tankers that typically carry crude oil loads of 700,000 barrels in the Atlantic Basin. Over the past three years, OSG has invested over \$800 Million in the renewal of our fleet with modern double-hull vessels.

OSG commends the Committee for holding these hearings to highlight the critical issue of protecting our marine environment, coastlines and commerce from the dan-

gers posed by older, substandard tanker tonnage.

When Congress enacted the Oil Pollution Act of 1990 ("OPA-90"), the U.S. took a bold leap forward, leading the world in requiring double hulls and imposing other new safety requirements for tankers moving oil to our shores. The International Maritime Organization ("IMO") followed our lead to require double hulls on all new vessels for the rest of the world. But recent spills involving older, single-hull vessels

off the coast of Europe highlight the continuing dangers associated with older single-hull vessels and the very real risk that stricter rules in other parts of the world will force such vessels to trade to the U.S.

will force such vessels to trade to the U.S.

On November 19, 2002, the PRESTIGE, a 26-year-old single-hull tanker carrying 77,000 tons of heavy fuel oil split apart and sank some 130 miles off the coast of Spain. Cargo from the PRESTIGE has continued to wash up onto the coastline of Galicia and to pollute sensitive fishing grounds. It is now also washing ashore in the picturesque Landes region near Bordeaux. The clean-up costs in Spain alone have exceeded \$200 million and the vessel is still leaking oil. The PRESTIGE sinking was strikingly similar to the pollution incident involving the 1975 built product carrier ERIKA. The ERIKA split in two and sank off the coast of Brittany, France in December 1999, polluting the tourist beaches in the Bay of Biscay. Both of these pollution disasters involved older, single-hull vessels nearing the end of their permissible trading lives under existing IMO regulations.

With the sinking of the PRESTIGE, the EU, and in particular Spain, France and

Portugal have moved rapidly and forcefully to ban substandard tonnage from EU waters. The European Commission has recently adopted an outright ban on any single-hull vessel carrying heavy fuel oil or heavy crude from entering EU ports. This ban will be submitted to the EU Council and Parliament and is expected to become ban will be submitted to the EU Council and Parliament and is expected to become effective by March of this year. The EU is also proposing to significantly accelerate the phase-out of all single-hull tankers, with the most vulnerable pre 1982 built single-hull tankers to be phased out at 23 years of age. At the same time the EU has proposed that all single-hull tankers reaching age 15 will have to comply with strict inspections under a Condition Assessment Scheme.

France, Spain and Portugal have already acted to exclude single-hull vessels carrying fuel oil and heavy crude from passing within their 200 mile Economic Exclusion Zones. These nations have also significantly stepped up their inspections of aldor tankers. The EU is also solving to establish a god of conduct with the oil

older tankers. The EU is also seeking to establish a code of conduct with the oil industry that will preclude the chartering of any single-hull vessel over 23 years of

In the highly competitive world of international shipping, restrictions that bar older tonnage from particular trades necessarily drive substandard tonnage to trades where regulations and practices are more lax and permissive. The U.S. cannot allow our waters to become a haven for older single-hull vessels that are no longer permitted to trade to the EU or to other major trading nations like Japan and Korea. We must act to restrict these vessels from trading to the U.S. or face an unacceptable risk of our own PRESTIGE or ERIKA oil spill.

This is most eloquently illustrated by an article that appeared in *Lloyd's List* on January 8, 2003, a copy of which is appended to my testimony. As stated in the article, a single-hull tanker carrying crude oil which had been scheduled to discharge in Spain was diverted to the U.S. because of the present sensitivity of Spain to calls

Proof that current U.S. rules encourage substandard tonnage to enter the U.S. is all too evident today in the VLCC trade. Shockingly, a disproportionately large number of the world's remaining 25 year old single hull VLCCs are trading to the U.S. Gulf each day. Under an exception to the phase-out rules of OPA-90, such vessels are permitted to offload 18 miles off the coast of Louisiana at LOOP or to lighter in designated areas of the U.S. Gulf as close as 60 miles from shore. For a number of years, it has been well known in the tanker business that such vessels are not welcome in Japan or Korea. Since the ERIKA incident in 1999, it is also the fact that such vessels are discouraged from calling to the EU.

Fifty-six single hull VLCCs of 25 years of age or older had been fixed on voyages to the U.S. Gulf Coast in 2002. This represents over 40 percent of all spot liftings worldwide on vessels of this vintage. Only one vessel over 25 years of age was fixed worldwide on vessels of this vintage. Only one vessel over 25 years of age was fixed to the EU in all of 2002. Not a single vessel of this vintage discharged in Japan or in Korea. Similarly, 50 percent of all spot liftings on VLCCs of between 21 and 25 years of age—some 171 liftings—discharged in the U.S. Gulf. Not a single vessel of this vintage discharged in the EU or in Japan or Korea in 2002.

The trend of over-age VLCCs trading in disproportionately high numbers to the U.S. has unfortunately continued into 2003. For the first week of this year, on a world-wide basis, a total of six spot fixtures were reported of VLCCs in excess of 20 years of age. Every one of these fixtures of old, single hull VLCCs involved the movement of crude oil from the Middle East to the U.S. Gulf.

Once the current EU proposals to ban single-hull vessels from their ports and

Once the current EU proposals to ban single-hull vessels from their ports and coastal waters are put into effect, these vessels will be forced to seek employment in trades that still accept them. Under existing U.S. law, a single hull VLCC, Aframax or Panamax (carrying approximately 400,000 barrels) vessel can enter a U.S. port until age 23. If the vessel has either a double bottom or double sides, it

can trade to the U.S. until age 28. When single-hull vessels are banned entirely from trading in fuel oil or heavy crudes to the EU, where will these vessels trade? As older single hull VLCCs are discouraged from trading to the EU, Japan and Korea, where will these vessels trade? We cannot allow our rules to be more permis-

sive, or these vessels will surely trade here.

The issue is not one of law enforcement. The Coast Guard has done an admirable job of enforcing OPA-90 requirements. But the world is changing. Our laws need to keep up with those changes. As an aside, I would just point out that if the Coast Guard is faced with a need to inspect an increasingly large number of older singlehull vessels, consideration should be given to providing the Coast Guard additional

resources to meet this challenge.

We submit it is wholly unacceptable to let the U.S. become the port of last resort. As a matter of law and public policy, the Congress declared in 1990 that the U.S. would ban older, substandard tonnage from its shores. Congress concluded that these vessels represent an unacceptable risk to our environment. Unfortunately, recent incidents in Europe confirm that such vessels continue to trade and do in fact pose a grave risk to our oceans and our coastlines. The U.S. cannot stand by and permit others to adopt more stringent trading rules that drive such vessels to our shores. We must maintain our vigilance and ensure that our rules restrict such vessels from trading to the U.S.

Lloyd's List, January 8, 2003

SPANISH BAN SENDS SINGLE-HULL ELCANO SHIP TO U.S.

VOYAGE SHOWS INCONSISTENCIES SHIPOWNERS FACE IN THE REGULATORY SHAKE-UP FOLLOWING THE PRESTIGE LOSS

By Brian Reves

A SPANISH-operated suezmax tanker fixed last month for a trip to Spain but subsequently banned under Madrid's new rules for single-hull ships, has been rerouted on a charter to the U.S., once regarded as the nation with the toughest rules for such vessels.

Industry observers said the voyage illustrates the sort of inconsistencies that shipowners now face due to the regulatory shake-up following the loss of the PRES-

A ban on single-hull tankers carrying heavy grades of oil, agreed at a European Union transport council last month, has created a situation where vessels allowed into strictly-controlled U.S. waters could now be barred from Europe.

"A single-hull ship is not inherently a bad ship," said one industry official, adding that the focus for policy makers should be on issues such as ports of refuge. The important factor is that the U.S. accepts this ship but not the EU.

"This was probably not the desired effect (of the EU proposal)," he added.

The 131,391 dwt Almudaina, built in Spain in 1993 and operated by former state-owned company Elcano, was due to call at the Spanish ports of Cartagena and La Coruña last Sunday and tomorrow, carrying crude from Cayo Arcas Terminal in Mexico. But the single-hull ship, which is equipped with segregated ballast tanks and has a spotless inspection record, was re-routed and is now fixed for a journey from Port Gentil, in Gabon, where it is due on January 15, to Philadelphia, where

it is expected on February 5.
Officially, Elcano said that the Spanish ban, announced shortly after the transport council and approved in a Royal Decree law last month, had not affected any

of its ships

But well-placed sources confirmed that the Almudaina's charter to Spain had been dropped and changed to the U.S. voyage, adding that the decision was taken be-

cause of the present political climate in Spain.

The voyage is indicative of a broader trend that is becoming evident as charterers avoid single-hull tankers for trips to Spain. "There have been virtually no singlehull tankers chartered to Spain since the Royal Decree came into force," said one

With other European countries expected to follow Spain's lead and implement the ban in national legislation, brokers are already warning of tonnage shortages to Eu-

One of the main initial concerns with the Spanish ban was the lack of fine detail in the Royal Decree law, particularly the definitions of the crude cargoes that would Spanish shipowner association Anave has had verbal confirmation from the government that the ban will affect vessels carrying crude oils with an API grade below 30, which is in line with the EU agreement.

The Royal Decree law applies to all single-hull vessels of more than 5,000 dwt, which means that bunker barges and small tankers operating in Spanish ports are

largely exempt.

But there is concern in the shipowning community that Brussels wants to set that tonnage threshold as low as 600 dwt, which could impact on other types of vessel that carry thousands of tonnes of bunker fuel in single-hull fuel tanks.

Shipowners cannot challenge the law except on constitutional grounds, which is seen by experts as a legal non-starter.

It is possible, however, to challenge the way the law is being applied on a caseby-case basis.

One Spanish shipowner that carries fuel between the country's island territories has apparently managed to get around the ban by agreeing to keep its side cargo tanks empty, effectively giving its vessel a second skin.

The Chairman. Well, thank you, Mr. Cowen. In other words, you believe that we should enact the same rules that are now pending before the EU?

Mr. COWEN. Mr. Chairman, I believe that we have to be very vigilant to make certain that if they do adopt those rules that the vessels do not trade here in disproportionate numbers.

The CHAIRMAN. But you do not go so far as—I do not know how you would do that except by adopting those same rules. Do you?

Mr. COWEN. No, I think you are right, Mr. Chairman.

The CHAIRMAN. Well, let me start out here with something that I think disturbs a lot of Americans and puzzles me, and I do not know if there is anything to be done about it, but I think it affects the confidence of Americans about the security of their environment. I take it that PRESTIGE was not an unusual ship in this respect: Japanese-built, owned by a company registered in Liberia, managed by a Greek firm, registered in the Bahamas, certified by an American organization, chartered by a Swiss-based Russian trading company.

Why do we have—why can we not have a ship that is built in a country and perhaps operated in another country? I know one of the answers is labor, wages, standards, et cetera. But does this build confidence in the American people, to know that ships like that, in those conditions—I mean, who would we hold responsible if something like happened with the PRESTIGE off of Spain happened in the United States of America? The Bahamas? The Liberian 2 Country 2 Provinces 2

rians? Greeks? Russians?

We will begin with you, Mr. Cox. You are an expert.

Mr. Cox. Thank you, Senator. I was hoping you would go alphabetically by association.

[Laughter.]

Mr. Čox. I think your description of the circumstance around the ownership and operation and crewing and that of that vessel is certainly not strange in the maritime industry. The IMO did look at an issue which we put on the table when we began the security debate last year in February, and that was beneficial ownership. The idea was that the beneficial owner—and there is no description of that term, Senator, but at the same time, I would call beneficial owner that person who ultimately receives the final profits from that vessel's operation.

The IMO looked into that and, after much debate at the Maritime Safety Committee, they kicked it over, not uncharacteristically, but they kicked it over to the legal committee, to say you take a look at it. What they came in with was that the key aspect of a vessel is that person who has control over the operations of that vessel.

The CHAIRMAN. OK, but let me interrupt. Let me have a dialogue with you. But if it is registered in one country, the purpose of the registry is that that country would make sure that any ship registered under its flag would meet certain standards and criteria, right?

Mr. Cox. Correct, sir.

The CHAIRMAN. Then would not that country be responsible? Would not Liberia or the Bahamas be responsible, not the person or entity that is making the money, or both?

Mr. Čox. Yes, sir, in respect to your example, the Liberians are the ones who would have their flag on that ship. That would be the country we would look to as being responsible for the conditions of the vessel in terms of it meeting standards.

The CHAIRMAN. And as you know, Liberia would say: Fine, we

are responsible; so?

Mr. Cox. Well, we can get into a description of the flags, of what are called the flags of convenience, and how good or not good they are. But carrying on from that issue, Liberia as the flag and in the state does not control the movements of the vessel. Someone controls the movements of that vessel.

The CHAIRMAN. But the fact that it is registered in that country gives that country the responsibility for it. Otherwise they should not register it under that flag. That is why its country's flag is fly-

ing on the stern of the ship.

Mr. Cox. I am not disagreeing on that, Senator. I think that you are getting to a very critical and pertinent piece of information within the maritime community, and that is who can we finger and hold responsible for the operation of the vessel, and that person also has the responsibility for the condition of the vessel also. It is not just where it is going, but what condition is that ship. That is the person we are trying to get to.

The CHAIRMAN. Maybe that is why, maybe that is why, Mr. Rauta, they throw the captain in jail, because they sure know that

they are not going to get any Liberians. Go ahead.

Mr. RAUTA. Thank you, Mr. Chairman. If I may come back to your first question regarding who is responsible for the operation of the ship, the answer is the operator or the owner. It depends on the structure. It is no doubt about this. In this case the operator is known, the owner is known. All factors such as the class society who has classified the ship, are known.

The CHAIRMAN. The country under which that ship is flying the flag bears responsibility.

Mr. RAUTA. Bears, shares—

The CHAIRMAN. Any interpretation of international law will tell you that. Otherwise, it does not have the right to fly its flag.

Mr. RAUTA. I do not disagree. It shares the responsibility and, therefore, the Bahamas flag, which by the way has one of the best

records, probably better than many EU flags or Administrations, will be the one conducting the accident investigation.

The CHAIRMAN. Well, I believe in dialog here, Mr. Rauta. You are telling me that the Liberians can carry out the kind of inspections and enforce the kind of standards on a ship and its construction

and its operation that the French can?

Mr. RAUTA. Mr. Chairman, with due respect, it is Bahamas, and by the records of port state control in this country, in Paris MOU agreements and in Far East Port State Control agreements Bahamas has—or ships registered with Bahamas, have very good records. In the Paris MOU system in Europe, they belong to a short list of white-listed flags, so their records are good, generally speaking. About this case, we need to find out the causes and listen to the investigation report.

On the business type of-

The CHAIRMAN. Mr. Sandalow, this kind of lash-up is not the exception, it is the rule; is that right?

Mr. Sandalow. That is absolutely correct, Mr. Chairman.

The CHAIRMAN. I am not interrupting. I am going to get back to you, Mr. Rauta.

Go ahead.

Mr. Sandalow. Let me just say, this Bahama-Liberian-Greek-Japanese web of control here is a huge concern, and it is one reason that we need to take long-term steps under the Convention on the Law of the Sea to have additional obligations on flag states. They need to actually have duties and responsibilities, as well as the capability to carry out the responsibilities that they are under-

The CHAIRMAN. Continue, Mr. Rauta—go ahead. Mr. SANDALOW. One additional point, Mr. Chairman. It is going to take a while to get there. In the interim, we need these "no go' zones I talked about in order to protect the most sensitive areas of the ocean.

The CHAIRMAN. Complete your comment, Mr. Rauta.

Mr. RAUTA. Mr. Chairman, on the business relationship that you describe, maybe not though with so many different countries of residence, but there are many other businesses which are likewise administrated and organized. It is not only shipping. So, it is not particularly only for maritime business which has such an organizational structure.

The Chairman. But those other businesses do not carry crude oil around the world and bring and cause a risk to lives and environment.

Mr. Rauta. This is correct, sir. This is correct.

Now, in our comments, what we have said is actually not in contradiction to anybody else. The only plea we make is, No. 1, that if there are going to be corrective actions, those should be based on factual—fact-finding accident investigation and, No. 2 that those corrective actions are discussed, applied and adopted at an international level.

Now, the master of the ship is the key witness on this investigation. That man has battled in impossible weather for 24 hours to hook the vessel to the tug boat. After that he is put in jail and sits there for the last 2 months. That man probably would not be the excellent witness an investigator would need to have in order to clarify the real cause of the accident. That was the background of

my statement.

The CHAIRMAN. I would be glad if there is any of the other witnesses that have a comment on this particular issue, because it has all got to do with confidence. I do not think that Americans, who I am worried about, but I am worried about all citizens of the world, have any confidence in the safety, the maintenance, all of the aspects that have the do with prevention of these kinds of things, when they are an alphabet soup.

Go ahead, Mr. Allegretti.

Mr. Allegretti. At the risk of appearing to be a shameless opportunist, Mr. Chairman, and I go here with some trepidation because I know you are a skeptic, the kinds of concerns that you raise about international shipping do not exist in the domestic fleet because of the Jones Act, and because all of the vessels that trade domestically in the United States are owned by American citizens, operated by American crews, and built in U.S. shipyards, and are subject to the-

The Chairman. I appreciate that commercial, but these ships come into U.S. ports and operate in U.S. waters. That was the issue, after the commercial is over for the Jones Act, which has raised costs dramatically to all American citizens who consume products that are carried in this exclusionary fashion. That is my

commercial.

Go ahead.

Mr. Allegretti. I said I was going there with trepidation. I think I have made the point.

[Laughter.]

The CHAIRMAN. No, but please go ahead if you had a comment on this other situation.

Mr. Allegretti. I would simply say that the question of confidence is one that should not exist with respect to domestic trade because we are subject to the full extent of Û.S. law within American jurisprudence, and to all the liabilities that accrue under OPA-90. End of commercial.

The CHAIRMAN. I thank you, Mr. Allegretti. I think you do make a very legitimate point because we do have confidence in ships that are carrying an American flag. I would like to have that same confidence in every ship that carries any flag of any nation in the world, and that is not the case today.

Go ahead, Mr. Cox, if you want to. We will go down, if you have

any additional comments, or just pass.
Mr. Cox. Just quickly, Senator, that the international maritime community is engaged in a debate as we sit here on transparency. That is, are we too secretive in regards to holding close to the chest cards that do not have to be held close to the chest and should be opened up for review. I think the investigation into the PRESTIGE, the class society and the governments involved have been extremely open, much more open than any previous incident. So, this is an extremely good time for you to be expressing an interest in this aspect of the industry.

The CHAIRMAN. Mr. Godfrey.

Mr. Godfrey. Mr. Chairman, yes. I believe OPA-90 is good evidence that when you can clearly define who is responsible you get good results. I think in the international realm of shipping, it is a mess out there, and I think again one of our points was we believe that liability and responsibility needs to be clarified.

The CHAIRMAN. Mr. Sandalow, anything in addition?

Mr. SANDALOW. A quick additional point. This is an area where I think we can work very productively with the European Union in light of what has happened over the past couple of months, and particularly putting short-term diplomatic pressure on the worst violators of flags of convenience-type rules.

The CHAIRMAN. Mr. Frick, I know you do not have a direct interest, but it is your product that is carried. Do you have any additional transfer of the control of the contro

tional? And I, again, apologize for the inconvenience.

Mr. Frick. It is like a bad cocktail party.

[Laughter.]

Mr. FRICK. What I would like to add to this is that—and I am not touching the whole issue of flags of convenience, both from a knowledge standpoint, and I know it is a very complicated issue. But what I think we can look at to your question of confidence is that OPA did more than just deal with single hulls. It has a system, the Coast Guard has a system, our members have systems, in

which they look at these tankers that are coming in.

So we screen these facilities. It is not just that they say, well, it is coming from Liberia, they flagged it, it is OK. There is a lot of other review that takes place as a part of our own companies' practices, but also because of some of the initiatives that have been brought in by OPA. So that I think what we are missing here is that there are a lot of other aspects of it, all of which lead us to the results, which I tried to emphasize, we are not having these dangerous ships come in. We have a way of ensuring that the ones coming in are meeting higher standards, and that is why in the last year that they have records 200 gallons were spilled when 3.2—barrels, excuse me—while 3.2 billion barrels were imported.

So, I think the record shows we are doing better and part of it is because of these other elements, such as certificates of financial responsibility and other elements of OPA.

The CHAIRMAN. Thank you.

Mr. Frick—I mean Mr. Cowen. I am sorry.

Mr. COWEN. Thank you, Mr. Chairman. Mr. Chairman, I agree wholeheartedly that Americans should have confidence in all the oil that is coming into our country. We are importing 10 million barrels a day by sea.

The CHAIRMAN. Not just oil.

Mr. Cowen. Yes, absolutely, Mr. Chairman. The point that I wish to make is OSG is a U.S.-based tanker company. We are a rarity today in the industry. For reasons having to do with the tax law, U.S. owners of these vessels that move the oil are at a competitive disadvantage. With your permission, Mr. Chairman, I would be pleased to submit for the record a brief statement that would explain some of the tax problems we have, and why we are not on a level playing field with our foreign competitors.

But we do very much believe that there should be a greater U.S. ownership involvement in the vessels that move oil on the high seas and come into our ports.

The CHAIRMAN. Thank you, and we will include that statement in the record.

[The information referred to follows:]

Overseas Shipholding Group Inc. New York, January 31, 2003

Hon. JOHN McCAIN, Chairman, Commerce, Science, and Transportation Committee, Washington, DC.

Dear Mr. Chairman:

I am writing to follow up on a point that you raised with me at the January 9, 2003, Commerce, Science, and Transportation Committee hearing on the phase-out of single-hull tanker vessels. I appreciate your allowing me to provide material for the record to supplement my response, and I am submitting this letter for inclusion in the hearing record.

At the hearing, you expressed your concern about the general lack of transparency relating to foreign-owned ships entering U.S. waters. In order to achieve greater transparency, we should be encouraging greater U.S. ownership of vessels in our foreign trade. U.S. owners are well known to Coast Guard and other federal agencies. If the U.S. tax law were modified to remove a significant obstacle that impedes U.S. ownership of international shipping, there would be a far greater number of U.S. companies engaged in this business.

As a result of tax-law changes enacted in 1975 and 1986, U.S. shipping companies must pay tax on income earned by subsidiaries overseas immediately rather than when such income is later brought back to the United States. This treatment represents a sharp departure from the generally applicable income tax principle of "deferral" and places U.S.-based owners of international fleets at a distinct tax disadvantage compared to their foreign-based competitors. Most foreign-based carriers pay no home-country taxes on income they earn abroad from international shipping.

As a result of this competitive imbalance, U.S. companies now hold precious little share of the world shipping marketplace. Indeed, U.S. ownership of vessels engaged in international shipping dropped precipitously in the aftermath of the 1975 and 1986 tax-law changes. Before 1975, the U.S.-owned share of the world's open-registry shipping fleet stood at 26 percent. By 1986, the U.S. share had dropped to 14 percent. By 1996, the U.S. share had dropped to 5 percent. ¹

The Treasury Department, in a recent study, clearly articulated the problem created by present law for U.S.-owned shipping:

U.S.-owned foreign subsidiary from its shipping operations, while that company's foreign-owned competitors are not subject to tax on their shipping income. Consequently, the U.S.-based company's margin on such operations is reduced by the amount of the tax, putting it at a disadvantage relative to the foreign competitor that does not bear such a tax. The U.S.-based company has less income to reinvest in its business, which can mean less growth and reduced future opportunities for that company. ²
Bipartisan legislation that would seek to address the problems described by

Bipartisan legislation that would seek to address the problems described by Treasury was introduced in the 107th Congress by Rep. Jerry Weller (R–IL). Similar legislation is being reintroduced this Congress, and we would greatly appreciate your support. Enactment of this legislation would encourage greater U.S. ownership of international shipping, and therefore greater transparency with respect to ships entering U.S. coastal waters.

Other security concerns also are raised by the decline in U.S. ownership in the international shipping trade. The U.S. military, in times of emergency, relies on the ability to requisition U.S.-owned foreign-flagged tankers, bulk carriers, and other vessels to carry oil, gasoline, and other materials in defense of U.S. interests over-

¹Price Waterhouse, "Decline in the U.S.-Controlled Share of the Open-Registry Merchant Shipping Fleet Since 1975," June 6, 1997.

² "Corporate Inversion Transactions: Tax Policy Implications," Office of Tax Policy, Depart-

 ^{2&}lt;sup>th</sup>Corporate Inversion Transactions: Tax Policy Implications," Office of Tax Policy, Depart ment of the Treasury, May 2002.
 ³ HR. 3312, 107th Cong.

seas. These vessels comprise the Effective United States Control ("EUSC") fleet. The sharp decline in the EUSC fleet since the 1975 and 1986 tax-law changes, and the resulting adverse strategic consequences, have been confirmed in a recent MIT

study. 4

U.S. security depends in no small part on our ability to maintain adequate domestic oil supplies in times of emergency. The United States consumes approximately 19.6 million barrels of oil per day, of which roughly 55 percent, mostly crude, is imported into the United States. It is estimated that 95 percent of all oil imported into the United States by sea is now imported on foreign-owned tankers. This means that one half of every gallon of oil consumed in the United States is carried on foreign-owned vessels. This growing dependence on foreign parties—who may not be sympathetic to U.S. interests—to deliver our oil in times of global crisis is cause for potential alarm.

Enactment of the tax legislation discussed above would mitigate these concerns. I would be happy to provide you with any additional information on these or other

issues if you wish.

Sincerely,

ROBERT N. COWEN, Senior Vice President and Chief Operating Officer.

The CHAIRMAN. With the indulgence of my colleague from Oregon, I ask one more question for the panel. Should the U.S. consider adopting the European Commission proposal, particularly if it is adopted by the IMO, and what impacts would the EU proposal have on the U.S. flag fleet? Mr. Rauta, beginning with you, sir.

Mr. RAUTA. Thank you very much, sir. Well, difficult to give you a straight answer because the EU proposes two new regulations. The first is an accelerated phase-out, which it might be more clear and probably easier to look into the statistics and make a judge-

ment.

The second proposed regulation is to restrict certain types of cargo of being transported in single-hull tankers. These cargoes are heavy fuel oils, which are well-defined, and heavy crude oils. This is—there is no definition at the moment for heavy crude oils. There are two or three alternative definitions. In our written submissions, and according to the proposed rule by the European Commission at the moment, we listed to our best ability those crudes that might fall into the heavy crude oil category that in Europe should be brought in, or trade out by double hulls only.

Now, with that degree of uncertainty it would be very difficult to make an assessment globally. In the United States, probably in the long-term, I personally would not believe there will be too much of an impact. In the short term, it depends very much on the definition of what is a heavy crude oil. Most of the Venezuelan crude, some of the crude from West Africa, and a couple of crudes coming from the Arabian Gulf will fall in this category, should the

EU still retain the definition that they are proposing now.

We basically have alternative definitions given there. So, we will have to wait and see what is the final outcome.

The CHAIRMAN. Thank you.

Mr. Allegretti.

Mr. ALLEGRETTI. I am not an expert on the EU proposal, but my understanding of it is that it has many, many similarities with OPA-90, and indeed is moving the European regulatory system closer to what we already have here. I hesitate to say that there

⁴ "Increasing the Size of the Effective United States Control Fleet" Massachusetts Institute of Technology, August 2002.

would be no impact on U.S. flag vessels because I think that in order to figure out what the impact is of that movement, you have to actually look at the vessel, at its size, at its age, and make a comparison.

But I believe that it is correct that, generally speaking, the EU proposals are largely in accordance with what we already live

under here in the U.S. under OPA-90.

The CHAIRMAN. I think they accelerate what we are doing here.

Mr. Cox

Mr. Cox. Thank you, Senator. I agree, I think they accelerate in terms of the single hulls calling into LOOP and into the lightering zones. My testimony was, yes, there could be a market shift of some ships to our market, and we do have to take a look at that. We also suggest that we do not open up all of OPA–90 and redo everything that is working satisfactorily now. But we certainly do have to pay strict attention to something that is occurring in another major market that could have an impact on us.

I think one of the factors that could ameliorate our concern is the port state control that we exercise. I think I can say with some confidence that our inspection circumstances here in the U.S. are much stronger than even in the EU, and therefore, we are protected even today by a more stringent and diverse type of an inspection regime. So, that would have to be factored into our deter-

mination.

Thank you.

The CHAIRMAN. Thank you.

Mr. Godfrey.

Mr. GODFREY. Mr. Chairman, in general the Shipbuilders Council believes that Congress should confirm OPA-90 without any significant change. However, and to qualify that, we think there are going to be a few good ideas in the new EU regulations, for instance stricter inspection, more frequent inspection of older vessels. We think Congress should consider adopting some of those enhancements.

Last, I would say that we need to be very careful to watch what the final form of these regulations might be, because if they turn out to be tremendously different than OPA-90 and there became quite a difference in terms of timing and the conditions under which vessels would be put out of service, anything that would increase traffic of aged vessels toward U.S. shores needs to be guarded against.

I think we are going to have to watch and anticipate the direct and the indirect effects of those new regulations in Europe. And I do not know what they will be, but we need to watch it very close-

ly.

The CHAIRMAN. Mr. Sandalow.

Thank you, Mr. Godfrey.

Mr. Sandalow. Yes.

The CHAIRMAN. Thank you.

Mr. Sandalow. Delighted to elaborate. This will help us protect our oceans. I am encouraged by what I hear to be some of the openness from my colleagues on the panel here to the suggestion that you raise.

The CHAIRMAN. Thank you.

Mr. Frick, I think you can take a pass if you want to on this. Mr. Cowen.

Mr. Cowen. I think certainly, in terms of the possibility that tighter EU rules would apply and drive the vessels they do not want to our shores, we certainly have to act. So far as the Jones Act trade goes, I would say that that is not directly impacted by rules that have the effect of driving other international flag vessels here. The Jones Act trade, of course, is a trade unto itself. But in that trade, I think we have to continue to remain vigilant. We maintain the Jones Act vessels to a high standard. These vessels are in our ports every day. These vessels are subject to Coast Guard regulation every day. And I note that the Alaskan fleet is currently being replaced with double hulls that are on order right now. So I think that modernization of the Jones Act fleet is happening.

The CHAIRMAN. Thank you. I want to thank the entire panel for a very interesting and informative discussion.

Senator Wyden.

STATEMENT OF HON. RON WYDEN, U.S. SENATOR FROM OREGON

Senator Wyden. [presiding] Thank you, Mr. Chairman. I want to join you, Mr. Chairman, in this effort to close the loopholes on the foreign-flag vessels. I think, frankly, you have been pretty diplomatic in terms of how you have handled it. To me, what is going on is real simple. You have got these foreign-flag vessels playing a corporate shell game. They are playing a shell game that is designed to try to avoid accountability, to hide the ownership interests along the lines that the chairman is talking about.

I want you to know, Mr. Chairman, I am going to support you fully in the effort to close the loopholes in this statute. That is priority business.

Frankly, I would like to see us go significantly further. I think there is much to do in this area. The system certainly incentivizes using older, less seaworthy vessels rather than modern double-hulled vessels. Again and again, as you look at this area, it seems to me that profits are constantly trumping safety, to the detriment of communities across the country.

We have had a special problem in my home State. The NEW CARISSA ran aground on Oregon's shores in February 1999. We saw firsthand environmental devastation on our special coastline, and we have been playing catch-up ball to repair the damage done to the State's shoreline and coastal resources ever since. That was a spill involving a ship carrying 400,000 gallons of oil, and supertankers like the EXXON VALDEZ that split in two and sank off Spain carry millions of gallons of oil and that is why it is important that we go at this in a comprehensive way.

So, I wanted to start with a question for Mr. Frick if I might. It has been reported, Mr. Frick, that the tanker ERIKA that broke in half and sank off the coast of France was chartered by the oil company TotalFina Elf at half the going market rate and that the oil company officials involved in chartering the tanker were rewarded for keeping down the charter cost.

My question to you is, how do you justify a system that creates these perverse incentives to charter less seaworthy vessels that put at risk coastlines and livelihoods of coastal communities rather than the charters that seem to me to be in the public interest, and

those are the modern, state-of-the-art charter vessels?

Mr. FRICK. Obviously, I have no immediate knowledge of the details of the charter there. All I would say is that for the traffic into the United States, due to OPA, due to the policies of our members and the Coast Guard's activities, I would submit that that is not the lowest—we are not looking for the lowest price. We have many criteria we use. We have high limits of liability that we have to deal with. We have our own standards that we apply.

So, I think it would be wrong to say that cost is the only factor in making those determinations. I think OPA, company policies, Coast Guard policies are working to get the better ships into the

United States.

Senator Wyden. Well, let us examine that. It is my understanding that the difference in chartering single-hull versus double-hull vessels in the domestic trades for charters of approximately 6 months to 2 years is approximately \$4,000 to \$5,000 a day. Now, over the course of the year, that difference is as much as \$1.5 million, certainly what looks to me to be a substantial financial incentive not to charter the double-hull tankers.

Do you not think—and again, I am not going to ask you about a specific case. But is not, from the standpoint of the system, is that not a substantial financial incentive that exists today for chartering the older, less seaworthy vessels? Because I do not want us to say that government policy should be to just sit around and hope that you do not have a disaster. I want government policy to try to create the appropriate incentives to limit the prospect for tragedies

Mr. FRICK. I think we will find that the statistics are showing that the number of shipments coming in by double hulls is growing significantly. I think it is about 50–50 now. So I think there are a lot of reasons.

Just because—and second is, just because you have an older single-hull ship does not mean that it is not seaworthy. If you have the right inspections, if you have the right criteria that you are applying, you can ensure that they are of high quality performance coming in. So, I think just because we have those, we have age and single hull, does not mean those are not seaworthy ships.

Senator Wyden. I think that is just one of the sort of structural problems I see with respect to the industry today. I look at the fact that ships containing as much diesel oil as a small tanker are not regulated as you would have a double-hull vessel. That was part of the problem in Oregon. I think what I would like to do is take

the panel through the Oregon situation.

In Oregon, you have a vessel, the NEW CARISSA, that ran aground. It was not a tanker, it was a cargo ship. But at the time it ran aground, it was carrying 400,000 gallons of fuel oil. Now, this caused enormous devastation to our coastline and severe economic hardship to the coastal communities.

What ought to be done in the view of this panel to reduce the risk of oil spills from these ships? This seems to me to be another

shortcoming in the statutes as they exist on the books. I would like to hear what this panel thinks, because you have got a situation where my State has been hammered as a result of a tragedy involving a ship containing as much diesel oil as a small tanker, and the fact of the matter is it is not regulated with the kind of safety provisions that you would have with the double-hull requirements.

Let us take this panel, and we can just begin at the end of the

table.

Mr. COWEN. Thank you, Senator. Your point is, of course, well taken. It is a fact, what happened. OSG, I might say, has recently modified the designs on the latest double-hulled tankers it is building to actually extend the double hull to cover the bunker area. This is, in fact, an area of additional vulnerability and I think the point is well-taken. Of course, accidents can happen regardless of what you do, but I think that is an additional element of safety that can be introduced into tanker design, or any ship design.

Senator WYDEN. Would others on the panel like to respond?

Mr. Cox. Thank you, Senator. Yes, we were certainly aware of the NEW CARISSA and the outcome there, and there were some operational issues that have to be looked at. But at the same time, I wrote down here "protective fuel tank location." I think that is something that has to be looked at for all types of ships.

I believe that the NEW CARISSA was a bulk carrier and she went aground and the fuel spilled. I do not know the technical de-

tails.

Senator Wyden. How would you see strengthening the fuel tank protections that you have touched on?

Mr. Cox. Well, you would want to locate the fuel tanks in a protected location, maybe aft in vertical-type tanks.

Senator Wyden. So, you would require that of new vessel construction?

Mr. Cox. That is what I think we are looking at at the IMO, fuel tank location.

Senator you brought up an interesting point, which is that certainly OPA-90 covers oil spills from all types of ships. So if a ship like the NEW CARISSA happens it is certainly an OPA incident in terms of spilling that oil, even though it was not cargo, it was oil in the water.

Senator Wyden. Other suggestions from panel members? Yes?

Mr. RAUTA. Senator, thank you very much. Actually, the NEW CARISSA accident really did bring the issue that you raised here to IMO. The issue is on the IMO agenda. However, the ERIKA accident and all this revision of phasing out of single-hull tankers kind of delayed those developments in IMO related to protection of bunker tanks.

Now, the good news is that the IMO is taking up again the issue and actually INTERTANKO, together with the U.S.-based Society of Naval Architects and Marine Engineers, have already submitted a paper for an IMO meeting in March with suggestions of a methodology on how to address this issue for all ship types.

Senator Wyden. How soon could that be implemented? Again, what my constituents are very frustrated about is that we have spent years now wrangling with the owners of this company, and we still have this vessel out there, and there is enormous frustra-

tion. It seems that there is one meeting or one workshop after another and very little done to actually get in place the changes.

Mr. RAUTA. Senator, we here, we are NGO's, we are industry representatives. In IMO, it is very much up to the governments to speed up the rulemaking development. The last couple of years IMO have shown very much strength in speeding up legislation. So, I would say that immediately when IMO shapes up proposed regulations, and when the industry has the confidence that those proposals will not be changed throughout the approval procedure, all the new ships will be built up to those standards, even before the rules come into force.

Senator Wyden. Others? Yes?

Mr. SANDALOW. Senator, another question is whether the NEW CARISSA should have been at that location at all. If it was an area of special importance to coastal communities, or an area of special biological importance, the answer is no, it should not have been. One of the proposals that could make a difference in this type of incident is to have "no go" zones adopted by the IMO to make sure that vessels are not traversing over areas where accidents would cause a special damage to communities and to fisheries.

Senator Wyden. Other suggestions?

Mr. Godfrey. Senator, if I might make a few comments. Any new requirements that would require greater hull protection for fuel tanks would have very far-reaching implications for all vessels, including many vessels that are not necessarily concerned with OPA-90. Many vessels in the domestic trade are carrying fuel in single-skin tanks. This would, of course, also include military vessels and vessels owned by the U.S. Government. Many of those vessels are fueled with tanks that are adjacent to the exterior shell

You would have to reconfigure the fleet of the entire world to deal with that regulation, and I do not know how that could be dealt with in any period of time reasonably. So, that is a big issue, and I just caution that it has massive implications for all vessels and I do not know how you deal with it, frankly.

Senator WYDEN. So, you do not do anything? Mr. Godfrey. No, sir, I am not saying that.

Senator Wyden. Well, tell me what you do. You have told me what you are against. I would like to know-

Mr. Godfrey. No, I am not against. Senator Wyden. I would like to know what you are for, because the fact of the matter is 3 years after this tragedy in Oregon involving a ship containing as much diesel oil as a small tanker, which was not subject to the tougher rules, we still do not have a remedy for the people in Oregon who are hurting as a result of this tragedy.

I want to be sensitive to the questions of cost, and making sure that you phase in any new requirements and all of the technical questions that are relevant to putting in place these new requirements. But I think what has been important about this hearing is it has exposed some very significant loopholes in the system.

Tell me what you are for?

Mr. Godfrey. Well, first of all, I am all for making these vessels safer. I am concerned that that type of requirement would take far longer than OPA-90 to put into place. There are many vessels by nature of their design, and by nature of their naval architecture that would become unstable and unseaworthy if the fuels were removed from those tanks, or relocated elsewhere in the vessel. It would require a complete redesign of the world's fleet.

What I would suggest, first of all, shipyards would be delighted to be involved. And I assume, since the chairman is no longer here, I can set forth an advertisement. We would love to take that prob-

lem on and fix it.

Senator WYDEN. I have absolutely nothing against the idea of putting people to work in the Portland shipyard.

[Laughter.]

Mr. Godfrey. Very good, Senator.

Senator Wyden. If that is part of the remedy, folks, that we can come up with something that beefs up safety and creates some family wage jobs in shipyards, I think you will have a lot of Senators flock to that proposition.

Mr. Godfrey. Well, to encourage you, Senator, I am sure there are good engineering solutions and we look forward to helping you

with them.

Senator Wyden. Let us hold the record open for your suggestions on this point, because I will tell you I just had a town hall meeting in Coos Bay, Oregon, in fact just this past weekend, where there is substantial frustration as a result of the years worth of wrangling with the company and the inability to secure the compensation that is appropriate. People want answers. I will hold the record open. I think the points you are making with respect to how you do it and ensuring that it is cost-effective and which vessels and under what circumstances are very fair questions. But we have got to find answers to this.

Mr. Cox, did you want to get into this?

Mr. Cox. Yes, Senator, I would like to add onto the concerns of the shipyards, and that is, we have begun to engage this protective fuel tank location issue. It will affect all vessels in the world's fleet. I think you can confidently go back and tell the people of Oregon that the initiatives that the U.S. took to the IMO are going to have a major impact on the way ships are designed throughout the world.

Certainly, it is going to take a lot of time in eventually coming to fruition on changing all these vessels. But at the same time, Senator, if we do not start we will not get to the point where we want to be, either, and we are at that starting point.

Senator Wyden. Gentlemen, anything you want to add further?

[No response.]

Senator Wyden. I think your last point, Mr. Cox, is again a fair one, and I would only say in rejoinder what my constituents want to know as a result of what happened in Oregon, as a result of news reports that they have seen around the country, is they are asking: How many gallons of oil need to be spilled, and how many miles of coastline need to be destroyed before our country gets serious about this issue, and gets serious about dealing with vessels that are unseaworthy, and are transporting oil in our coastal waters?

The problems are particularly egregious with respect to these foreign vessels that the chairman has been talking about. But suffice it to say that it is relevant in a number of other areas. So there is much to do on this.

Do any of you gentlemen have anything further that you would like to add this afternoon?

[No response.]

If not, the hearing is adjourned.

[Whereupon, at 4:43 p.m., the Committee was adjourned.]

APPENDIX

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN McCain to Thomas A. Allegretti

Question 1. Mr. Allegretti, you indicated in your statement that "there is a surplus of tonnage on the market today—more vessels than are needed to meet U.S. demand for oil transportation." Yet Mr. Godfrey, from the Shipbuilders Council has stated that there is a growing shortfall in capacity. How do you explain this dif-

Answer. With all due respect to our colleagues from the shipyard industry, we do not foresee a growing capacity shortfall as they suggest. In fact, we have a fundamentally different view of the very premise of their concerns that suggests future transport capacity constraints. AWO does not believe the Committee should have any concerns about the long-term ability of America's tank vessel industry to move the nation's energy cargoes. We reach this conclusion for several reasons.

First, we question both the supply and demand projections used by the shipyards. Arguably, projecting demand is an imprecise art that involves several factors that are themselves hard to predict. But, every projection of the demand for domestic ocean transportation of energy cargoes that AWO has seen is relatively flat. As our testimony pointed out, the amount of oil moved by tank barges in 2000 was the same as that moved in 1990. If history is any guide, we do not anticipate any sky-

rocketing demand for oil transportation in the near future.

On the supply side, an analysis prepared by the shipbuilders about 16 months ago was projecting a shortage of more than half a million deadweight tons in the domestic tank vessel fleet by 2005. Yet, their January 9 hearing testimony shows that projected shortage to now be only 98,000 deadweight tons. The disparity of those two projections in such a short timeframe would suggest that they are not an accurate

basis for concluding that the nation faces a crisis.

The most precise information available, which gives us confidence that no capacity crisis is on the horizon, is the track record of our industry to be there to provide transportation whenever shippers have a need for transportation. That historically and routinely takes place as a function of the market, and as a result of the fact that we enjoy in this country families and companies who have a long-term commitment to this business. Our testimony highlights nearly a half-dozen prominent examples of that—companies that have been in the oil transportation business for generations and that have invested hundreds of millions of dollars in the recapitalization and modernization of their fleets. Their track record is clear that they are committed to meet the needs of their customers. If the shortage projected by the shipbuilders is indeed accurate, that is a business opportunity that these companies will be pleased to seize.

Finally, the Committee should have an appreciation for the fact that the 2005 shortage projected by the shipbuilders is not terribly surprising. The vessel of choice for ocean transportation is the ATB, which the yards say takes less than 18 months to build. It is unlikely that an examination of vessel capacity available in 2005

would reflect today an order already placed for such a vessel.

Question 2. If a capacity problem were to develop in a market, how long would it take for your members to establish additional capacity in that market?

Question 2a. Am I correct that if a crisis were to develop, your members would

very likely see it coming and act in advance to build additional capacity?

Answer. As I outlined in my testimony, the OPA-90 phase-out schedule is only one of the factors that determines when new double-hull vessels will be built. To be sure, it is a "bottom line" for the elimination from service of single-hull vessels. However, the decision to construct new double hull capacity is basically an economic one, made as a result of a variety of economic and market factors.

Each AWO member is of necessity an expert in the particular markets in which they operate. They watch their markets closely to remain competitive and to anticipate business opportunities. They are constantly evaluating rates and demand, both current and projected, and factoring in their current and projected fixed and variable costs, to decide the best course of action for their business. If they were to see a capacity shortfall on the horizon, and I am confident that they would, they would not regard it as a crisis but as a business opportunity—and they would be prepared to take advantage of that opportunity by ordering additional vessels at an appropriate point.

So I believe that AWO members would act well in advance of any capacity short-fall to meet the needs of the market. The lead-time required for ordering vessels to meet anticipated demands is relatively short. As I testified, the construction time for a new ATB of the type used on coastal routes is less than 18 months. For inland tank barges and smaller coastal vessels, the construction time would be shorter.

Question 3. Can you tell us how the federal agencies involved in enforcement of OPA-90 monitor your industry? What types of inspection of tank barges are conducted by federal agencies? How often is the integrity of a barge inspected and by whom?

Answer. Tank barges carrying oil, petroleum products and hazardous substances must meet comprehensive Coast Guard standards for design, construction, equipment and all elements of their operation. These vessels are inspected by the Coast Guard annually to ensure compliance.

The specific requirements for inspection of tank vessels, including tank barges, are contained in 46 CFR Part 31. Tank vessels are required to be fully examined for the issuance of a Certificate of Inspection (COI) every 5 years. In addition, another full inspection is required at the midpoint of the 5-year COI inspection cycle. Finally, as stated above, an annual inspection is required to determine any deficiencies or major changes in the vessel. The initial inspection for issuance of the COI and subsequent 5-year renewal inspections may be conducted by approved classification societies under the Coast Guard's Alternative Compliance Program. All other inspections are conducted by Coast Guard marine inspectors.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN McCain TO TOM GODFREY

Question 1. It is clear from your written statement that you are in favor of phasing out all single-hull tankers no later than what is mandated under OPA-90. That is understandable on your part given that the phase-out means more business for U.S. shipyards. However, your analysis of domestic capacity, demand, and availability, seems to ignore the decline in demand for domestic movements of crude and oil products. Do you disagree that demand for oil movements is declining?

Answer. We agree that demand for crude oil movement from Alaska has declined dramatically in recent years; however, we disagree with the assumption that demand for domestic product movements is declining and will continue to do so. Over the long term oil consumption will grow and demand for transportation of that oil product will grow as well.

My written testimony focused exclusively on coastwise product movement. Carriage of crude oil from Alaska is a unique market that must be considered separately from the coastwise petroleum transportation market. Vessels built to carry crude from Alaska are not transferable to the domestic coastwise product trades, because of their larger size and cost of operation. The Alaska North Slope trade is really a function of the refining process—market rules do not apply, because there is no alternative mode of transportation available.

Product movement is impacted by varied circumstances at various times. For example, today much of the demand for New England heating oil is being met with product imports from Europe because product refined in the Gulf of Mexico is being diverted to the Caribbean to replace production interruption in Venezuela. Product imports from Europe are temporarily available at discounted prices because European demand for product has decreased due to slow economic growth in most EU countries and the move from gasoline to diesel fuel as Europe's primary source of energy. European refineries are retooling their output to increase diesel production and reduce gasoline production, which will soon end the overcapacity situation in Europe and lead to more expensive product exports and a greater demand for domestic product movement. Similarly, the political uncertainty in Venezuela will ultimately be resolved and the product currently being diverted to the Caribbean will again be available for the New England marketplace increasing demand for coastwise product movement.

The biggest determinant in the demand for product movement; however, is the economy. Economic growth is inevitable and that growth will require more fuel. Increased consumption will increase demand for product movement. This cannot be ac-

complished solely in pipelines-waterborne product movement has to increase as well. Pipelines can only increase capacity by 10 percent and pipelines are not practical for all types of product movement. Increasing pipeline capacity beyond the 10 percent, which is possible with the current infrastructure, will be cost prohibitive and environmentally risky. Growth for demand of coastwise product movement is inevitable.

Question 2. What is the average cost to build a handysize product tanker in a U.S. shipyard? What would that same vessel cost if built in a foreign shipyard? How do you explain the difference?

Answer. The cost to build a handysize product tanker in a commercially oriented shipyard in the U.S. today is approximately \$90 million. Several U.S. yards are currently working with foreign yards to take advantage of their buying power and proven designs to reduce that price. A similarly sized vessel can be purchased from

Asian shipyards for approximately \$30 million.

No one single reason explains the difference between U.S. and Asian tanker construction pricing. There are a number of factors not the least of which is the fact that America has not built many large commercial ships in more than two decades and our nation has not benefited from the experience and efficiencies that series construction provides. Because Americans haven't had the same opportunities to learn from experience, U.S. productivity lags behind Asian shipyards. This situation will not be reversed until American yards see the same type of series construction projects that have proved so beneficial to Asian shipbuilders.

Another factor is that, for the most part, U.S.-flag operators want ships designed to their individual company's specifications and usually include duplicative systems and more robust steel requirements than foreign designs require. Most Asian yards develop a ship design and primarily offer only that design. Foreign operators buy the stock design. Asian ship owners are much like an American consumer walking into a car showroom and choosing the model you want. Obviously, the cost would be much greater if you ask the factory to build you a car three feet longer, six inches

wider and with other specialty features not offered on the basic design.

Complying with U.S. labor, safety and environmental regulations are more rigorous and expensive than in foreign countries and add to the price differential. In the U.S., we understand that it is counterproductive to pollute the environment building ships designed to protect the environment. One concrete example of a regulatory compliance cost in the U.S. is that shipbuilders are required by Congress to participate in the workers compensation scheme provided for in the Longshoreman Act—complying with this requirement costs an estimated 12 cents of every payroll dollar.

Moreover, the cost of materials is also more expensive for U.S. yards. Our material costs alone are greater than the delivered price of product tankers in most Asian yards. For example, the materials package for a handysize product tanker constructed in the U.S. is estimated at roughly \$40 million, while Korean yards can buy the materials for the same vessel for roughly half that amount. Commercial shipyards in the U.S. are not subsidized and haven't been for several decades. Foreign governments have enacted policies that promote domestic shipbuilding because they understand that shipbuilding is a labor intensive business that supports large numbers of industrial jobs

Question 3. In your written testimony, you mention that international operators have for some time been taking advantage of subsidized construction prices. I understand that vessel pricing in Asian shipyards has been the subject of some debate for the last several years. Can you tell us how vessel construction is being subsidized in these shipyards?

Answer. Subsidization of foreign shipyards is a complex issue. Subsidization over an extended period of time creates huge market distortions, because it allows subsidized shipyards to maintain artificial order books and use the work generated through those order books to learn and implement production efficiencies that unsubsidized shipyards cannot achieve. Once that production advantage has been achieved, it becomes extremely difficult for shipyards that have not benefited from extended subsidization to reach market parity. When a shipyard or a shipbuilding country has established itself as a market leader, the market advantages multiply.

A perfect example of this fact is the way Korean shipyards have used volume buying power to reduce material costs. As I mentioned earlier, Korean shipyards because they buy in huge volumes and have created the world's most extensive shipbuilding infrastructure, they can purchase materials and equipment needed to build ships for half what the same equipment would cost a U.S. yard.

Korea is the "poster child" for shipbuilding subsidies. The EU has a case pending in the WTO alleging that the Korean government:

- 1. provides repayment guarantees for vessels built for export if the contracts are not fulfilled;
- provides through KEXIM, the state-owned Export-Import Bank of Korea export subsidies in the form of excessively low interest loans;
- engineered massive debt forgiveness, preferential debt-for-equity conversions, debt and interest relief, and tax concessions for Korean shipbuilding companies; and,
- provides direct subsidies to upstream suppliers of key shipbuilding components and materials, thereby indirectly subsidizing shipbuilding costs.

Korean shipbuilding companies have used this array of subsidies and preferential government policies to build one of the world's most efficient shipbuilding industries. Tragically, U.S. taxpayer financed loans from the International Monetary Fund has likely subsidized these activities.

EU shipyards, despite complaints over Asian subsidization, also benefit from direct and indirect subsidies. Official EU policy today allows a subsidy payment of 15 percent of the cost of containerships built in EU countries. EU shipyards also benefit from indirect subsidies for worker training, etc. because the EU understands the necessity of maintaining strategic heavy industries as a way to keep workers employed.

Question 3a. Does the U.S. have trade agreements regarding shipbuilding with the nations involved?

Answer. To my knowledge the U.S. does not have shipbuilding trade agreements with major shipbuilding nations.

Question 3b. Would you object if the Administration included shipbuilding in its next round of trade negotiations with these countries?

Answer. The Shipbuilders Council of America strongly supported the OECD Shipbuilding Agreement negotiated during the first Bush and Clinton administrations. Unfortunately, that agreement was never ratified by Congress and served only to divide the industry and divert our attention away from a focus on modernization and productivity improvements. I do not believe that at the current time it would be in the best interest of U.S. shipyards to include shipbuilding in the next round of trade negotiations. The U.S. government, American workers and the shipyard industry would be better served focusing on ways to improve our operations to build for the domestic market before we attempt again to level the playing field on the world market, which has benefited from massive government funded improvements not available in the U.S.

Question 4. How much of an impact has OPA-90 had in forcing ships to be replaced before the end of their useful lives?

Answer. The impact of OPA-90 in forcing ship retirements sooner than the end of their useful lives has been minimal. The OPA-90 retirement schedule was negotiated with broad maritime industry participation, which resulted in a reasonable and practical retirement schedule that allowed vessels to stay in service until their estimated useful lives had expired. Unfortunately, even the largest charterers have been unwilling to pay a premium to ship on double-hull tonnage except in rate circumstances. As a result, vessel owners understandably have an incentive to operate single-hulls as long as possible.

Question 5. How much does a double hull add to the cost of a new tanker or barge?

Answer. No single-hull tank vessels have been built in the U.S. since OPA-90 was enacted so an exact cost differential is difficult to provide; however, the industry estimates that the cost differential between single-hull and double-hull construction for similar vessel types is a modest 5 to 10 percent of the delivered price, primarily accounted for with additional steel and labor costs, although a double-hull vessel may require a slightly more extensive piping system. The added steel requirement is less than one would expect because adding the double-hull removes much of the internal framing required for single-hull construction.

Question 6. In your written statement you state that by 2008, the shortfall in product tanker and barge capacity will grow to 756,000 dwt assuming no growth in transportation demand and the current OPA-90 retirement schedule. To what do you contribute this shortfall?

Answer. The shortfall is the result of tonnage retired under OPA-90 that to date has not been replaced.

Question 6a. If the issue is that revenues from oil tanker transportation are not sufficient to justify investment in new capacity, what has been the driving force behind the construction of the new articulated tug/barges, or AT/Bs?

Answer. AT/B revenue does allow for new construction today. AT/Bs are less expensive to build and operate and their improved operating efficiencies make them more competitive than previous designs.

Question 6b. Do you expect that most of the shortfall in capacity will ultimately be made up by AT/Bs rather than self-propelled product tankers?

Answer. Some capacity has already moved from tanker to barges and more may well follow; however, self-propelled tankers are economically more desirable for some trades, primarily those with greater sea leg voyage length.

Question 7. The written statement of the American Waterways Operators (AWO) states that "... government and industry sources agree that there is a surplus of tonnage on the market today—more vessels than are needed to meet demand for oil transportation ..." The written statement of API states that demand in the movement of both Alaska Crude Oil and oil products is declining. Figures from the U.S. Maritime Administration from 2000 also show demand is dropping as well. Can you explain why AWO's and API's conclusions are so different from your organizations?

Answer. The AWO statement referred to government studies that considered supply/demand through 2004 and not beyond (prior to a major OPA-90 retirement date—2005). I don't disagree with that statement; however, as the statistics in my testimony indicate, a vessel shortfall will occur beginning in 2005 unless new vessels are built to replace tonnage forced into retirement by OPA-90. I believe it vital that the Congress consider the impact of vessel retirements in 2005 and beyond. Product tankers contracted for today cannot be delivered for operation until 2005. Failure to sign construction contracts this year will make vessel delivery in time to meet the projected 2005 vessel capacity shortfall virtually impossible.

The testimony provided by the American Petroleum Institute correctly segregated the Alaska North Slope crude trade from the coastwise petroleum product trade, but the testimony relied on market demand and vessel capacity in 2000. Similar to the testimony of AWO, the testimony did not consider OPA-90 retirements in post 2000 years, which are significant. The U.S.-flag fleet of 64 product tankers referred to in the API testimony will be reduced to a maximum of 50 ships by 2005 and will be further reduced to a maximum of 42 ships in 2008—and only 21 of these ships are double-hulled.

Estimating the demand for coastwise product movement is difficult to project because so many factors impact demand; however, there are some basic assumptions that can be relied upon. The overall economy will grow over time and with that growth will come increased demand for product movement, pipelines are not practical for every type of product movement, pipelines are already operating at virtually full capacity, and pipeline operators have announced no plans to expand capacity. Common sense dictates that demand for coastwise product movement will increase. The statistics in my testimony assume a very modest growth rate projected in the only public study on coastwise product movement demand of which I am aware. It will always be possible to look at specific time periods where demand for product movement is low—warm winters, economic downturns, post September 11 travel decline, etc.; however, over any extended period of time, demand for product movement will increase. Furthermore, none of the testimony, including mine, considered the impact of Administration policy to promote ways for the U.S. to become more reliant on domestic sources of energy.

Question 8. How much does the age and condition of a vessel have to do with the risk that the hull, single or double, may be breached? The action of the European Commission suggests that it believes that single-hull vessels more than 23 years old are simply too dangerous to be operated.

Answer. Obviously age of the hull is one of the determining factors in whether a vessel is safe to operate, but more important than age is whether a vessel has been properly maintained, repaired and operated over the vessels life span. Properly maintained and operated ships can remain in service 25 years and beyond. With a rigorous inspection regime on the part of the classification society, there is no reason to require vessels to retire at an arbitrary age. However, common sense tells us that older vessels will be at greater risk and the EU proposal to require vessels older than 15 years to submit to an annual inspection makes good sense. We would suggest that the Committee consider requiring all vessels trading in the U.S. to be subject to more rigorous and frequent inspection programs.

¹Wilson, Gillette & Co. (as cited in *Double-Hulled Tanker Legislation: An Assessment of the Oil Pollution Act of 1990*, National Research Council, 1998.

Response to Written Questions Submitted by Hon. John McCain to Dragos Rauta

Question 1. Was the PRESTIGE an INTERTANKO vessel?

Answer. The manager of the vessel, Universe Maritime Ltd., of Greece, has been an INTERTANKO member in good standing since 1989.

Appendix 1 gives a general information sheet on PRESTIGE produced by INTERTANKO after the tanker sunk.

Question 2. Does membership in INTERTANKO carry with it responsibilities as to the maintenance and inspection of vessels?

Answer. To become a member of INTERTANKO, all applications are reviewed by the applicable INTERTANKO Regional Membership Panel in which the application is submitted then approved by a vote of the Association's Executive Committee and Council. In order to become a member, all applicants must:

- · Have experience in operating tankers;
- Demonstrate compliance with domestic and international requirements through Port State Control inspections;
- Have a certified International Safety Management (ISM) Code system:
- Classify their tankers with a Classification Society approved by the International Association of Classification Societies (IACS);
- · Enter their tankers with a Protection and Indemnity Club; and
- · Maintain oil pollution response plans and insurance cover.

INTERTANKO monitors its members' compliance with these criteria. We also pay close attention to members' Port State Control detention records. Lack of compliance with the above criteria or a negative record of detentions may result in a membership in the Association being suspended or terminated. **Appendix 2** gives more details on INTERTANKO membership Criteria.

Question 3. Are there international regulations governing the maintenance of tanker vessels?

Answer. There are numerous international, national and private requirements and arrangements regulating the operations and maintenance of tankers. This is the most heavily regulated segment of the maritime industry. The most important convention regulating and preventing marine pollution by ships is the IMO International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). It covers accidental and operational oil pollution as well as pollution by chemicals, goods in packaged form, sewage, garbage and air pollution. Vessel construction standards are also covered. In addition, the International Convention for the Safety of Life at Sea, 1974

In addition, the *International Convention for the Safety of Life at Sea, 1974 (SOLAS)*, specifies minimum standards for the construction, equipment and operation of ships, compatible with their safety. Flag States are responsible for ensuring that ships under their flag comply with its requirements, and a number of certificates are prescribed in the Convention to provide evidence of compliance. Port State Control provisions also allow governments and their agents to inspect ships of other nations if there are clear grounds for believing that the ship and its equipment do not substantially comply with the requirements of the Convention. Thus, the ship is subject to scrutiny both by the nation whose flag it carries and, as a check on that process, separate inspection and review by Port States.

Many flag and port states have unique domestic requirements pertaining to maintenance which are applied to vessels. These requirements are supplemented further by insurance and charterer standards and inspections.

In conclusion, tank vessels are subject to the strictest regime of inspections in the maritime industry.

Question 4. What actions have INTERTANKO members taken since the PRES-TIGE accident to prevent another spill?

Answer. As indicated in our testimony before the Committee, the accident investigation regarding the PRESTIGE is ongoing. Consequently, the "lessons learned" element of future measures must await an understanding of the causes of the casualty.

However, INTERTANKO has taken the following actions:

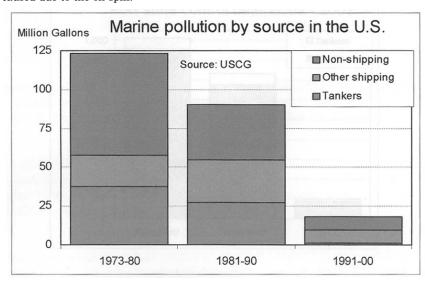
- we have offered data and statistical analysis to the European Commission;
- we have participated as an Observer to the IACS' Audit on the classification society which inspected the *PRESTIGE*, the American Bureau of Shipping (ABS). The Audit is part of the IACS Procedures to check whether the surveys,

repairs and controls performed by the Class Society was in conformity with all applicable rules and procedures;

- we have submitted a joint information paper to the International Maritime Organization (IMO), together with the U.S.-based Society of Naval Architects and Marine Engineers (SNAME), regarding assessment of risks associated with large fuel tanks; and
- we set up a "ship repair" assessment group with other industry partners. INERTANKO has established with industry partners representing classification societies, oil company' and other independent interests a "Ships in Service" work group. The purpose of this group is to review repair and maintenance procedures, class requirements, and a general assessment of safety margins in tanker structures, particularly in the latter stages of their working lives. This therefore complements work INTERTANKO has initiated with other shipowner groups in joining with classification societies and shipbuilding representatives to review design margins for new ships in order to ensure more robust and fitfor-purpose ships at delivery from the shipyards. This however has no direct bearing with the PRESTIGE accident. We are waiting for an official accident investigation result when, as appropriate, the industry will consider what, if any, further corrective measures may be required.

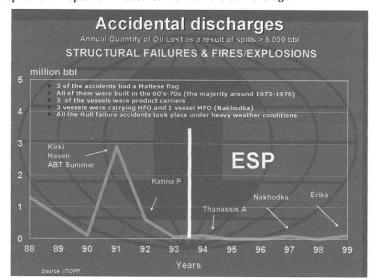
Question 5. The volume of oil spilled in U.S. waters and internationally has declined significantly over the past thirty years, while the amount of oil shipped has continued to increase. To what do you attribute the decline in international spills? Answer. There are several contributing causes. First, the IMO has become an inc reasingly important catalyst for greater international cooperation and regulation of marine safety and environmental protection. Since 1970, the shipping industry has seen the creation and expansion of MARPOL 73/78, the promulgation of numerous new requirements under SOLAS, the ratification of the International Convention on Standards for the Training, Certification and of Watch-keeping (STCW), the increased use of radar and adherence to the International Convention on the Prevention of Collisions at Sea (COLREGS), and acceptance of numerous other conventions, regulations, and resolutions concerning marine safety and environmental protection. These phased-in requirements have dramatically reduced both operational and accidental discharges of oil through enforceable international standards regarding design, construction, alteration, repair, maintenance, operation, equipping, personnel qualification, and manning of vessels. These international standards have contributed substantially to prevention of accidents the creation and maintenance of resources to respond effectively if an accident were to occur.

Second, there is greater industry interest and concern over protecting the marine environment. The industry reflects the greater public concern over the damage caused due to the oil spill.

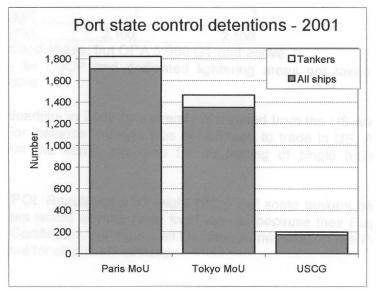


Finally, various flag and port states, charterers, insurers, and classification societies have developed their own systems to enhance safety and environmental protection. This all has contributed to a multi-layered "safety net" of requirements that has reduced accidents and the possibility of discharge of oil into the marine environment

As an example, please note the graph below that shows the dramatic decrease of pollution accidents after the implementation of the new Enhanced Survey Program (ESP) for inspection of tankers. The Inspection Program increases the extent and the scope of the inspection in accordance with the tanker's age.



These achievements are similarly reflected by the Port State Control detention records, on which the tankers' share is only a fraction of the total, with an excellent record in the U.S.



Question 6. The charts you have submitted with your statement are very helpful in explaining the impact of OPA-90, MARPOL 13G, and the EU proposal on the

phase-out of single-hull vessels. It appears to me that today, OPA-90 is effectively the governing law since it generally phases out single-hull vessels sooner than the international regulations. For the benefit of the Committee, could you explain the phase-out under each regulatory regime?

Answer. The three phase-out systems (OPA-90; MARPOL 13G and the new EU proposals) are difficult to compare. Each has its own implementation schedule based on size, age and type. In other words, they are similar but different. For easy reference, here is a comparison of the single-hull tanker phase-out, 5,000 dwt and above (by number of tankers) between the OPA-90, MARPOL 13G and the new EU proposals.

Phase-out year	OPA '90	MARPOL 13 G	EU new proposal
2002	201	N/A	N/A
2003	120	238	697
2004	99	173	133
2005	217	184	25
2006	67	219	62
2007	76	201	98
2008	56	123	123
2009	57	94	94
2010	401	76	563
2011	33	83	40
2012	28	83	32
2013	28	71	21
2014	31	79	29
2015	159	476	183
N/A*	527		
Grand Total	2,100	2,100	2,100

^{*} MARPOL 5,000 dwt and above, but OPA 5,000 GT and above OPA-90 exemptions for LOOP and dedicated lightering areas not taken into account for reasons explained above.

Be aware that OPA deadline in 2002 has already eliminated from the U.S. waters quite a lot of single-hull tankers. For instance PRESTIGE was not allowed to trade in U.S. Any differences in phase-out would have the same effect as far as trading of single hulls to U.S. ports is concerned.

of single hulls to U.S. ports is concerned.

In cases where MARPOL Regulation 13G might phase-out some tankers before the OPA-90 schedule, these tankers would anyway have to phase-out because their Flag Administrations would not give them Certificates. As almost all Maritime Administration are Party to MARPOL, the IMO deadline is final for single-hull tankers.

Question 7. Could you explain what actions INTERTANKO has taken to improve the transparence of vessel ownership and operation? What actions are being undertaken by the international community as a whole?

Answer. Information regarding the INTERTANKO Membership, the tankers registered and who control the ships is public information. We provide this information quarterly to the Equasis database. Equasis is a database which is administered by EU and which makes available data on ships, their operators, information of PSC and Vetting Inspection results.

and Vetting Inspection results, etc.

In December 1999, INTERTANKO took the initiative to promote transparency of information within the shipping industry. INTERTANKO was actually the first maritime association to adopt a concrete, defined transparency policy. The decision was taken by the INTERTANKO Council at its meeting in April 2000 in Sydney, Australia. Appendix 3 gives a more detailed explanation of the INTERTANKO contribution to promote transparency

tribution to promote transparency.

The issue of transparency has been given specific attention in IMO within the context of the new security regulations. The IMO and its Legal Committee will soon promulgate guidance on listing of a responsible entity for each ship.

promulgate guidance on listing of a responsible entity for each ship.

We hope this information is helpful. Please do not hesitate to contact me or our U.S. legal and governmental affairs representative, Jonathan Benner (202–274–2880) if you or your colleagues have additional questions or require amplification of any of this material.

APPENDIX 1

General information: M/T PRESTIGE (as on 25 November 2002) Ship name and type: M/T PRESTIGE (single-hull crude oil tanker)

Cargo: Heavy fuel oil (typically used as bunker fuel with specific gravity 0.99)

Load port: Ventspils, Latvia

Discharge port: Singapore Owner: Mare Shipping Inc (registered in Liberia)

Manager: Universe Maritime Ltd, Greece

INTERTANKO member: INTERTANKO member of good standing entered in 1989

Charterer: Crown Resources

Flag: Bahamas (since 1994 and white-list flag under Paris MoU) Class: American Bureau of Shipping (ABS) built and maintained to ABS class

P&I coverage: London Steamship Owners Association

IMO number: 7372141

Year of build: 1976 at Hitachi Shipbuilding & Engineering Co. in Japan

Gross tonnage: 42,820 Design deadweight: 81,564 Capacity: 100,813 cubic metres Sister vessels: None in service

Crew: 27 with Greek officers, Filipino and Romanian crew

Regulatory regime

The PRESTIGE was subject to a comprehensive regime of safety and environmental regulations, including those of the main IMO Conventions, i.e. the Safety of Life at Sea Convention (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL), to both of which the Flag State of the Bahamas is a Party.

Phasing-out of single-hull tankers

The revised MARPOL Convention contains a timetable by which single-hull tankers will be phased out in favour of double-hull ships. The PRESTIGE was a single-hull tanker built in 1976, that is before the MARPOL Convention (which had been adopted in 1973) entered into force in 1982. In April 2001, the Parties to the MARPOL Convention agreed to accelerate the timetable for phasing out existing single-hull tankers in a revised regulation 13G of that Convention. According to the revised regulation which entered into force internationally in September 2002, single-hull tankers built in 1976 would be required to be scrapped by 2005. The PRES-TIGE phase-out date was 11 March 2005.

Survey and inspection

In addition to their routine annual and other surveys, since 1995 all tankers aged five years and over have been subject to a specially enhanced inspection programme which is intended to ensure that any deficiencies—such as corrosion or wear and tear resulting from age or neglect—are detected. Guidelines on enhanced surveys on tankers are contained in IMO Assembly resolution A.744(18) and in 1994 it was given mandatory status under the SOLAS Convention. The PRESTIGE was therefore subject to the International Association of Classification Societies (IACS) Enhanced Survey Programme (ESP).

PRESTIGE Class survey:

- special survey No 5 conducted by ABS in Guangzhou, May 2001
 annual survey conducted in Dubai, UAE by ABS and certificates issued on 25 May 2002

PRESTIGE Port State Control (PSC) inspection:

• Equasis database indicates the last PSC inspection was conducted in Rotterdam on 1 September 1999. There were no detentions (3 deficiencies—2 lifesaving and

PRESTIGE ISM certification:

Issued by Bureau Veritas from 19 July 2001 to 20 June 2006

Oil spill clean up

In July 1989, a conference of leading industrial nations in Paris called upon IMO to develop further measures to prevent pollution from ships. This call was endorsed by the IMO Assembly in November of the same year and work began on a draft convention aimed at providing a global framework for international cooperation in combating major incidents or threats of marine pollution. The International Convention on Oil Pollution Preparedness and Co-operation (OPRC) entered into force 13 May 1995.

Parties to the OPRC convention are required to establish measures for dealing with pollution incidents, either nationally or in cooperation with other countries.

Ships are required to carry a shipboard oil pollution emergency plan. Operators of offshore units under the jurisdiction of Parties are also required to have oil pollution emergency plans or similar arrangements which must be co-ordinated with national systems for responding promptly and effectively to oil pollution incidents.

Ships are required to report incidents of pollution to coastal authorities and the convention details the actions that are then to be taken. The convention calls for the establishment of stockpiles of oil spill combating equipment, the holding of oil spill combating exercises and the development of detailed plans for dealing with pollution incidents.

Parties to the convention are required to provide assistance to others in the event of a pollution emergency and provision is made for the reimbursement of any assistance provided.

The Convention provides for IMO to play an important co-ordinating role. As Parties to OPRC, Spain and Portugal have established a national system for dealing with pollution incidents, either nationally or in co-operation with other

Oil pollution liability and compensation

Liability and compensation for spills of oil from tankers are covered by two complementary legal regimes adopted by IMO, the International Convention on Civil Liability for Oil Pollution Damage, 1992 and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 1992 (IOPC Fund)

i) CLC 1992—regulating liability and compensation from the shipowner

The Civil Liability Convention was adopted to ensure that adequate compensation is available to persons who suffer oil pollution damage resulting from maritime casualties involving oil-carrying ships.

The Convention places the liability for such damage on the owner of the ship from which the polluting oil escaped or was discharged without regard to fault.

- For a ship not exceeding 5,000 gross tonnage, liability is limited to 3 million SDR (about U.S.\$4.0 million)
- For a ship 5,000 to 140,000 gross tonnage: liability is limited to 3 million SDR plus 420 SDR (about U.S.\$559) for each additional unit of tonnage
- For a ship over 140,000 gross tonnage: liability is limited to 59.7 million SDR (about U.S.\$79.4 million)

The Convention covers pollution damage resulting from spills of persistent oils suffered in the territory (including the territorial sea) of a State Party to the Convention. Included in the scope of the Convention is also pollution damage caused in the exclusive economic zone (EEZ) or equivalent area of a State Party. The Protocol covers pollution damage as before but environmental damage compensation is limited to costs incurred for reasonable measures to reinstate the contaminated environment. It also allows expenses incurred for preventive measures to be recovered even when no spill of oil occurs, provided there was grave and imminent threat of pollution damage.

The Convention covers spills from sea-going vessels constructed or adapted to carry oil in bulk as cargo so that it applies to both laden and unladen tankers, including spills of bunker oil from such ships.

A shipowner cannot limit liability if it is proved that the pollution damage resulted from the shipowner's personal act or omission, committed with the intent to cause such damage, or recklessly and with knowledge that such damage would prob-

The Convention requires ships covered by it to maintain insurance in sums equivalent to the owner's total liability for one incident. The PRESTIGE held such insurance cover for oil pollution as all tankers engaged in the carriage of persistent oil.

ii) International Oil Pollution Compensation Fund (1992)

Although the original 1969 Civil Liability Convention provided a useful mechanism for ensuring the payment of compensation for oil pollution damage, it did not deal satisfactorily with all the legal, financial and other questions raised during the Conference adopting the CLC Convention.

Some States objected to the regime established, since it was based on the strict liability of the shipowner for damage which they could not foresee and, therefore, represented a dramatic departure from traditional maritime law which based liability on fault. On the other hand, some States felt that the limitation figures adopted were likely to be inadequate in cases of oil pollution damage involving large tankers. They therefore wanted an unlimited level of compensation or a very high limitation figure.

In the light of these reservations, the 1969 Brussels Conference considered a compromise proposal to establish an international fund, to be subscribed to by the cargo interests, which would be available for the dual purpose of, on the one hand, relieving the shipowner of the burden by the requirements of the new convention as very high or unlimited liability without regard to fault was untenable and, on the other hand, providing additional compensation to the victims of pollution damage in cases where compensation under the 1969 Civil Liability Convention was either inadequate or unobtainable. This conventions was amended in 1992 to broaden its scope and to increase the levels of compensation available. Its was also amended in 2000 in order to provide for higher levels of compensation (see below).

The purposes of the Fund Convention are:

- To provide compensation for pollution damage to the extent that the protection afforded by the 1969 Civil Liability Convention is inadequate.
- To give relief to shipowners in respect of the additional financial burden imposed on them by the 1969 Civil Liability Convention as cargo interests were also deemed a party in the transportation venture.

Under the first of its purposes, the Fund is under an obligation to pay compensation to States and persons who suffer pollution damage, if such persons are unable to obtain compensation from the owner of the ship from which the oil escaped or if the compensation due from such owner is not sufficient to cover the damage suffered.

Under the Fund Convention, victims of oil pollution damage may be compensated beyond the level of the shipowner's liability. Where, however, there is no shipowner liable or the shipowner liable is unable to meet their liability, the Fund will be required to pay the whole amount of compensation due.

Contributions to the Fund should be made by all persons (above a threshold of minimum 20,000 tonnes) who receive oil by sea in Contracting States.

Under the 1992 Protocol, the maximum amount of compensation payable from the Fund for a single incident, including the limit established under the 1992 CLC Protocol, is 135 million SDR (about U.S.\$179.6 million). However, if three States contributing to the Fund receive more than 600 million tonnes of oil per annum, the maximum amount is raised to 200 million SDR (about U.S.\$266 million), but this level have not yet been reached.

PRESTIGE incident notes

November 13, 2002—INTERTANKO received the alert message that the PRES-TIGE was in trouble. The ship was at that time reported to be listing 25 to 30 degrees and in danger of sinking with its cargo of fuel oil in the rough seas off the north-west Spanish coast. Twenty four crew members were evacuated by helicopter. The Captain, Chief Officer and Chief Engineer stayed on board.

November 14, 2002—The PRESTIGE drifted close to the Spanish coast but was stable enough to allow Coast Guard and inspectors aboard for an assessment of the condition.

November 15, 2002—The PRESTIGE was taken in tow by salvage tugs away from the Spanish coastline.

November 18, 2002—The PRESTIGE was towed further out to sea.

November 19, 2002—The PRESTIGE broke in two at around 0700 hours GMT some 160 miles from the shore. The two parts of the ship sank later in the afternoon with no loss of life.

Appendix 2

Membership Criteria as approved at Council meeting November 2002

1. IACS Classification Society

All members' tankers are to be classified by a Classification Society audited and approved by a full member of IACS.

2. Insurance Cover

All members are to be entered in an International Group P&I Club or have an appropriate arrangement for insurance including third party oil pollution liability cover.

3. ISM Certification

A member must have a certified and implemented ISM System. (The tanker industry embraced the International Ship Management Code at a very early stage.)

4. Ownership Control

We will hold on the members' area of our web site information pertaining to the member's vessels' Owner(s), (or the Registered Owning Company(s)), Operator(s), Technical Manager(s), as well as identification, which of the above bodies holds' the Company DOC.

5. Detention Criteria

INTERTANKO shall monitor members' detentions over a continuous rolling period of 12 months. The central database of members' detentions will be held by the

If in the opinion of the Vetting Committee Chairman and the Marine Manager the detention or repeated detentions are grounds for concern then the detention will be referred to the Review Board. The review Board will consist of the: Vetting Committee Chairman, ISTEC Chairman, Marine Manager INTERTANKO, Technical Director INTERTANKO, Managing Director INTERTANKO, General Counsel INTERTANKO.

In addition the following members may be invited to assist with the review as appropriate and depending upon the nature of the detention and/or the geographical location of the detention: Chemical Tanker Committee Chairman, Latin American Panel Chairman, North American Panel Chairman, Hellenic Panel Chairman, Asian Panel Chairman and Secretariat expertise as appropriate.

6. Entry with INTERTANKO

All members tank vessels' having a gross tonnage of 1000 tons or over and which is adapted for the carriage of oil in bulk, petroleum products and other liquids, including all kinds of combined bulk/tank vessels as ore/oil carriers, bulk/oil carriers, shall, in respect of all tank vessels which the applicant owns and/or manages including tank vessels of affiliated and associated companies be entered with INTERTANKO.

Appendix 3

Summary

The discussion about transparency in shipping is not new. The tanker industry considered a voluntary tanker information register called VISTA already in 1980. The purpose was to contribute to the dissemination of information, possibly to the Port State Control authorities and other governmental schemes, charterers and other parts of the industry. The transparency issue has regularly been on the INTERTANKO agenda in various forms and INTERTANKO has been in the forefront of the drive for increased transparency.

Review

In April 2000 INTERTANKO endorsed the principle of transparency with the following definition "Information on transfers, changes, suspensions, and withdrawals of class, including information on all overdue surveys, overdue recommendations, overdue conditions of class, operating conditions or operating restrictions issued against the vessel." The definition means that INTERTANKO's members agree that Class should disseminate the above information from the normal operations on their ships. This information should be made available to interested parties, such as PSC, Flag States and charterers.

INTERTANKO also agreed that, in addition to the information that class should provide on a regular basis, members would be encouraged to release a number of data in case of a major incident/accident on one of their ships. Such a list should be as follows but not limited to:

Information to be released by Owners after a major incident:

- relevant initial design information
- any significant design modifications (which, when and where/by which yard)
- Flag, Class, Authority issuing DOC and SMC Certificate
- details of the voyage when incident occurred historical record of the last 24 months PSC inspections table with:

 - all owners/managers and the time for each of these periods
 - all flags and time period

- all class societies and time period
- all significant casualties (what, when, where)
- all significant repairs (what, when, where/by which yard)

In August 2002, a Transparency Working Group was established to examine how progressively increasing and structured transparency could serve to enhance safety and quality, while mitigating any negative impact of the isolated information that the industry is now required to make public. The Working Group would also assist in suggesting responses to questions regarding the INTERTANKO position on transparency.

INTERTANKO position

INTERTANKO recognises and supports the need for transparency in tanker shipping and indeed in the entire shipping industry INTERTANKO encourages and supports initiatives aimed at ensuring that transparency is promoted to enhance the efficiency of tanker operations and provide value to the industry and benefits to the consumers and the environment.

INTERTANKO considers that there should be an accountable entity ("the company") having the necessary expertise for the ownership, operation and management of the ship. (The definition of "the Company" is contained within the ISM SOLAS IMO etc. This definition also encompasses owner, manager and operator.)

IMO etc. This definition also encompasses owner, manager and operator.)
INTERTANKO supports the use of the continuous synopsis record. IMO is currently considering whether this should be made mandatory. This encompasses the name of the ship, flag, registered owner, company and class/recognised organization.

Response to Written Questions Submitted by Hon. John McCain to Robert N. Cowen

Question 1. What effect would U.S. adoption of the EC proposal have on your com-

pany?

Answer. The EU Commission has recommended that the EU Council and Parliament adopt an outright ban, effective immediately, on the use of any single-hull vessel to carry fuel oil or certain heavy grades of crude oil into EU ports. The Commission has also proposed to ban the oldest single-hull tankers (so called Pre MARPOL tankers which are generally those built before 1982) when they reach 23 years of age and to ban all single-hull tankers effective 2010.

Because OSG's international tanker fleet consists primarily of modern double-hull vessels, the EU rules will have only a limited effect on the trading life of our fleet.

Most of the single-hull vessels in OSG's international flag fleet do not carry fuel oil or the heaviest grades of crude. Accordingly, these vessels are not impacted by the immediate ban on single-hull vessels carrying such cargoes. Rather, OSG's relatively modern single-hull vessels, many with double sides, are likely to have their trading lives shortened by only a few years if the new EU rules are made applicable to the U.S.

OSG's Very Large Crude Carrier fleet (vessels of over 200,000 deadweight tons that typically move long haul cargoes from the Middle East and West Africa) of 21 vessels includes 17 double-hull tankers that would not be affected at all by the new rules. The remaining four vessels are single-hull vessels that were built in 1990 (one vessel) and 1993 (three vessels); two have double sides. If the proposed EU rules were made applicable to the U.S., these four vessels could not carry certain heavier crudes to the U.S. Gulf and could not trade to the U.S. Gulf at all after 2010; under existing rules they would be permitted to trade to the U.S. Gulf until 2015.

Similarly, OSG's 14 vessel fleet of Aframax crude carriers (100,000 deadweight to the U.S.)

Similarly, OSG's 14 vessel fleet of Aframax crude carriers (100,000 deadweight ton) includes 13 modern double-hull units that would not be affected by the EU rules. The remaining Aframax is a double-sided vessel built in 1992 that can trade to the U.S. under current rules until 2015; under the EU rules it could no longer carry certain heavier crudes and would be barred from trading in 2010.

OSG has eight double-sided international flag product carriers that would be classified as single-hull vessels under the EU rules. They range in age from 14 to 17 years. Under existing U.S. and international rules, these vessels phase-out between 2012 and 2015. Under the EU proposal, these vessels would all phase-out in 2010, thereby losing between two and five years of trading life.

OSG has one single-hull Suezmax (145,000 deadweight ton) crude carrier built in 1989. Under the new EU rules, it would no longer be permitted to carry certain grades of heavy crude, but it would not otherwise be affected because it is barred from trading to the U.S. beginning in 2010 in any event by the Oil Pollution Act of 1990 ("OPA-90").

OSG's U.S. flag fleet of tankers includes four crude carriers engaged in the Alaskan trade which cease to be eligible for U.S. trading between 2004 and 2006 under the existing phase-out rules mandated by OPA-90. OSG also operates two U.S. flag single-hull product carriers with double bottoms that were built in 1982 and 1983. OSG bareboat charters these vessels under long-term charters expiring in 2011. If the EU rules were to apply to these vessels, they would lose approximately one year of trading eligibility and would have to leave the Jones Act trade in 2010.

Question 2. Do single-hull vessels operating off the coast of Louisiana at LOOP or at lightering areas off-shore pose the same level of risk as single-hull ships entering U.S. ports?

Question 2a. Isn't it because the risk of collision or grounding is significantly lower that these vessels are allowed to continue in those operations until 2015 under OPA_90?

Answer. The risk of grounding is no doubt reduced dramatically when tankers are operating offshore in the U.S. Gulf, whether trading to LOOP or operating in designated lightering areas 60 miles offshore. However, the risk of collision certainly remains if such vessels are moving in established trade lanes and approaching active lightering areas and offloading facilities such as LOOP. Moreover, the process of lightering itself pacessarily places two vessels in close provimity to each other

of lightering itself necessarily places two vessels in close proximity to each other. The recent disastrous pollution incidents involving the sinking of the ERIKA in 1999 off the coast of France and the PRESTIGE in 2002 off the coast of Spain, however, demonstrate clearly that collision and grounding are not the only environmental risks associated with operating older, single-hull vessels. While the precise cause of the break-up and sinking of the PRESTIGE has not yet been officially established, there is a general consensus that structural failures associated with these older single-hull vessels were major factors in both incidents. The PRESTIGE came apart over 130 miles from shore and yet it poses a continuing source of pollution and grave environmental damage for the Atlantic coast of Spain and France. Clearly, a structural failure of this nature, or a mechanical failure, involving an older single-hull vessel in the U.S. Gulf, whether 18 miles off the coast of Louisiana at LOOP or 60 miles off the U.S. Gulf coast in a designated lightering area, could have dire environmental consequences.

Question 2b. Do you have any single-hull tankers involved in those operations? Answer. As noted, OSG's fleet of 21 VLCCs includes four single-hull vessels. Three of these vessels, all built in 1993, typically move crude cargoes to the U.S. Gulf Coast where they are lightered. OSG's Aframax fleet includes one single-hull vessel that may from time to time engage in lightering activities in the U.S. Gulf.

Question 3. In your written testimony, you state that you operate a fleet of 50 vessels. How many are operated under the U.S. Flag?

Answer. OSG's fleet includes nine vessels registered under the U.S. flag. This includes four crude tankers engaged in the Alaskan oil trade: the Overseas Washington, Overseas Chicago, Overseas New York and Overseas Boston. All four are single-hull tankers, but three of them have double bottoms. OSG also operates two U.S. flag product tankers, the Overseas Philadelphia and Overseas New Orleans, which are single-hull vessels with double bottoms. OSG's remaining three U.S. flag vessels are not tankers. These include two dry bulk carriers and one car carrier.

Question 3a. What flag are the remaining vessels registered under?

Answer. OSG's international tanker fleet is primarily registered under the flag of the Marshall Islands, a U.S. protectorate. The only exceptions are three vessels registered under the Panamanian flag, five vessels under the flag of the Bahamas and three vessels under the Liberian flag.

Question 3b. What type of safety and security requirements do those other flag states impose on your vessels? Are they substantially different from the require-

ments imposed on vessels under the U.S. flag?

Answer. OSG vessels comply with the rules of the International Maritime Organization and all applicable international conventions included SOLAS (Safety of Life at Sea) and MARPOL (Marine Pollution) OSG's vessels also comply with all regulations and requirement of relevant classification societies, and with all flag state and port state requirements. Almost all of OSG's international flag tankers come to U.S. ports, LOOP or the U.S. Gulf lightering areas on a regular and frequent basis and, therefore, must comply with all U.S. Coast Guard requirements. OSG vessels are subject to frequent inspections both by the U.S. Coast Guard and by other port state authorities throughout the world. OSG serves all of the major oil companies and is subject to frequent vetting inspections by their operational staffs.

Because OSG's international flag tankers must regularly pass inspections by the U.S. Coast Guard as well as by other port state authorities, classification societies and charterers, our international flag vessels are effectively subject to the same rig-

orous operating, safety and security requirements and standards as apply to OSG's U.S. flag fleet.

U.S. flag fleet.

Question 3c. How many of your vessels are Jones Act qualified? Do those vessels cost more to operate?

Answer. OSG operates two Jones Act product tankers engaged in the domestic coastwise trade and four U.S. flag crude carriers engaged in the Alaskan crude trade. Jones Act vessels are typically much more expensive to own and operate than foreign flag vessels, reflecting both substantially higher capital costs associated with U.S. construction as well as higher operating costs. OSG estimates that the cost of operating a tanker under U.S. flag is approximately \$8,000 to \$10,000 per day higher than the cost of operating under a foreign flag.